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United States Department of Agriculture,

FEDERAL HORTICULTURAL BOARD.

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SERVICE AND REGULATORY ANNOUNCEMENTS.

JULY–DECEMBER, 1921.

CONTENTS.

	Page.
Record of current work	97
The pink bollworm	97
A new law for Texas	97
Federal quarantine revised	97
New infestations in Texas and conference at Dallas	97
Texas control program for 1922	98
Control in Louisiana	99
Control in New Mexico	99
Scouting work	100
Clean-up of cotton fields, 1921	100
Mexican border control	101
Research work in Mexico	101
Occurrence of, in the West Indies	101
The European corn borer	102
The gipsy and brown-tail moth quarantine revised	102
The Japanese beetle quarantine	103
The Mexican bean beetle quarantine raised	103
Quarantine established against the satin moth	103
The camphor scale	103
The nursery stock, plant, and seed quarantine (No. 37)	104
Heavy infestation of French fruit and rose stocks	104
Explanation of provisions for entry of plant novelties and propagation stock under regulation 14	104
Mail entry of imports under regulation 14 permitted	104
Restrictions on commercial entry to be maintained	105
Horticulturist added to board's staff	105
The potato wart disease	105
The white pine blister rust	106
The citrus fruit quarantine	106
The United States quarantined to protect Hawaii	107
Port inspection notes	107
Board participation at various meetings	108
Quarantine and other official announcements	109
The pink bollworm:	
Texas law of 1921	109
Joint resolution authorizing Federal aid to farmers in noncotton zones	115
Press notice	115
Quarantine on account of (No. 52)	116
Press notice	122
Amendment No. 1 to quarantine No. 52 (eliminating island of Galveston, Tex.)	122
Press notice	124

Quarantine and other official announcements—Continued.
The pink bollworm—Continued.
Notice of conference on, at Dallas, Tex., December 2, 1921 ---- 124
Press notice ---- 125
Summary of situation (presented at Dallas conference) ---- 126
Findings of conference ---- 130
Decides on a fight to the finish (press notice) ---- 131
State quarantine action relative to new infestations of 1921 in Ellis, Grayson, and Liberty Counties, Tex ---- 132
Sterilization of planting seed urged by Texas cottonseed breeders ---- 136
Authorized modification of quarantined districts in Louisiana ---- 136
Quarantine action by the State of New Mexico ---- 138
The European corn borer:
Notice of public hearing to consider extension of domestic quarantine ---- 140
Press notices ---- 141
Revision of domestic quarantine ---- 142
Press notice ---- 146
Revision of foreign quarantine ---- 147
Press notice ---- 150
The gipsy moth and brown-tail moth:
Modification of quarantine (regulation 3 amended) ---- 150
Press notice ---- 151
The Japanese beetle:
Revision of quarantine ---- 151
Press notice ---- 155
The Mexican bean beetle:
Notice of lifting of quarantine ---- 155
Press notice ---- 156
The satin moth:
Notice of public hearing to consider the advisability of quarantining the States of New Hampshire and Massachusetts ---- 157
Press notice ---- 157
Notice of quarantine No. 53 ---- 158
Press notice ---- 159
Potato-wart quarantine, modification of, refused ---- 160
The white-pine blister rust:
Notice of public hearing to consider the advisability of extending quarantine No. 26 to the State of Washington ---- 160
Press notice ---- 161
Memorandum concerning Ribes detention station at Mandan, N. Dak ---- 161
The United States quarantined to protect Hawaii:
Notice of public hearing to consider restrictions on movement of certain plant products in connection with passengers or ships' stores ---- 162
Press notice ---- 163
The movement of certain plant products from the United States to Hawaii restricted (quarantine No. 51) ---- 163
Press notice ---- 165
Instructions to postmasters:
Certification of mail shipments under quarantine No. 52 (pink bollworm) required ---- 166
Revision of points for terminal inspection (California) ---- 166
Revision of points for terminal inspection (Mississippi) ---- 168
Plant quarantine 37:
Explanation of provisions for entry of plant novelties and propagating stock ---- 168
Mail entry of imports under regulation 14, permitted ---- 169
Treasury decisions:
(No. 38811) Re Quarantine No. 41—European corn borer ---- 172
(No. 38812) Re Quarantine No. 37—Nursery stock, plants, and seeds ---- 172
Convictions for violations of Plant Quarantine Act ---- 173
List of current quarantine and other restrictive orders ---- 174

RECORD OF CURRENT WORK.

THE PINK BOLLWORM.

A NEW LAW FOR TEXAS.

The act vities set under way as a result of the pink bollworm conference held on the invitation of the Secretary of Agriculture in Washington, May 16, 1921, led, at the special session of the Texas Legislature in July and August, to the enactment of a new pink bollworm law, approved by the governor September 1st, 1921, in wh ch many of the defects of the previous pink bollworm legislation were corrected. This law, reproduced on subsequent pages of these announcements (pp. 109–14), provides for cooperation with the United States Department of Agriculture and for compensation to planters in noncotton zones.

Prior to this action by Texas, this department requested and secured authority from Congress to use not to exceed $200,000 of the existing pink bollworm appropriation to participate with the States in compensation of farmers in noncotton zones. This action was based on the recommendation of the conference and on the promise of the Texas conferees that they would make a strong effort to secure adequate pink bollworm legislation by their State, including the compensation feature. The joint resolution authorizing such use of funds was passed by Congress and received Executive approval August 9, 1921 (p. 115).

FEDERAL QUARANTINE REVISED.

The Federal quarantine of Texas and Louisiana on account of the pink bollworm (No. 46) was revised and reissued July 21, 1921, effective September 10, 1921, to cover the new infestations by this pest in western Texas, New Mexico, and at Shreveport, La. As provided for in this quarantine it has been possible with the cooperation of the States involved to limit the quarantine restrictions in these States to the areas actually invaded. Regulation 3 under this quarantine was amended October 24, 1921, effective November 1, 1921, to exclude from the areas in Texas designated as infested the island of Galveston. This quarantine, issued as No. 52, and amendment No. 1, are reproduced in this number, together with the explanatory press notices (pp. 116–124).

NEW INFESTATIONS IN TEXAS AND CONFERENCE AT DALLAS.

Two new points of infestation were determined late in 1921 in the most important cotton section of Texas, viz., in Ellis and Grayson Counties. These points represented the very beginning stage of infestation, and were traced to seed shipped from Carlsbad, N. Mex. Emergency quarantines were immediately placed about these districts by proclamation of the governor of Texas and all records of seed distribution from Carlsbad for the years 1918, 1919, and 1920 were determined. These indicated shipments to many points in Texas and also to a few points in Oklahoma and Arkansas. The possibilities of wide new infestation by the pink bollworm thus developed made it seem desirable to call for a cotton-State pink bollworm conference to determine future policy, and such conference was held December 2 at Dallas, Tex.

The information brought out at the conference indicated a somewhat more favorable outlook. It was evident that there had been little or no danger with any of the seed shipped from Carlsbad prior to 1920. The intensive field surveys maintained by the board during the three years 1918 to 1920, inclusive, had

revealed no infestations in this district prior to late in 1920, but even with this limitation there were still involved 39 shipments of 1920 seed to Texas and two each to Oklahoma and Arkansas. There were other considerations, however, which had a bearing on the possible risk from the movement of such 1920 seed, the most important of which was the fact that the intensive survey of nearly 100 fields in the Carlsbad district with respect to the crop of 1920 determined very incipient infestation in two fields only. Much of the seed therefore which moved from Carlsbad in 1920 prior to the discovery of infestation and the establishment of the quarantine, which immediately followed, undoubtedly was uninfested seed. Furthermore, much of this seed was crushed and in the case of many of the shipments the actual quantity was small. Field surveys of all the points involved had developed up to the time of the Dallas conference no infestations additional to those discovered in Ellis and Grayson Counties—nor have any others since been found. These considerations were important determining factors leading to the recommendation of the conference to continue the effort at extermination. Thorough field surveys are still in progress and will be continued next year with respect to all areas which received Carlsbad seed of the years 1918, 1919, and 1920.

The formal call for the conference and the press notices and informing statements issued in relation thereto, summarizing the results of the conference, together with the local quarantine action instituted by the State of Texas, are reproduced elsewhere in this number (pp. 124–131).

The conference developed an absolute unanimity of opinion that the strongest efforts, State and Federal, should be continued to effect the extermination of the pink bollworm in Texas and other Southern States, and unqualified assurances of support were given. A very strong feeling developed that if the situation remained substantially as then determined there was still a reasonable chance of exterminating this pest.

To accomplish this end the policy of maintenance of noncotton and regulated zones was endorsed. With respect, however, to the points of infestation in western Texas and in New Mexico it was decided for the present to continue such areas under regulation, confining the enforcement of noncotton zones to the eastern districts. This recommendation was made in view of the isolation from the main cotton belt of these western areas, their close proximity to Mexico, and, in the case of the Rio Grande districts, the impossibility of maintaining freedom from the pink bollworm pest until adequate cooperation with Mexico in clean-up work should have been secured.

TEXAS CONTROL PROGRAM FOR 1922.

Under the provisions of the Texas pink bollworm act approved September 1, 1921, a State pink bollworm commission has been appointed by the governor, including as permanent members Mr. R. E. McDonald, appointed on the recommendation of the commissioner of agriculture of Texas; W. D. Hunter, appointed on the recommendation of the Secretary of Agriculture of the United States; and Messrs. Lea Beatty, of Lockhart, Tex., and Charles McKnight, of Arlington, Tex., appointed by the governor. The fifth member of the commission, who is appointed by the district judge of the county or counties under consideration, is temporary, in the sense that a new appointee is named in connection with each district.

The commission thus created has already acted for 1922. For the infestation near Ennis, Tex., a large regulated zone is recommended, extending from 8 to 20 miles in different directions from Ennis and within this territory two small noncotton zones, one to include the four fields in the immediate vicinity of the mill, which was the source of the infestation, and the other the outlying field

2½ miles from Ennis. In each instance the noncotton zones will extend approximately 1 mile beyond the fields actually found infested. In the case of the infestation at Marilee, in Grayson County, the commission recommends a noncotton zone with a radius of one mile around the seed house containing infested seed and a regulated zone covering the ginning territory of the two towns of Gunter and Salina. This regulated zone will extend at least eight miles in every direction from point of infestation. With respect to the single new point of infestation in Liberty County determined in connection with the crop of 1921 in the old Trinity Bay district, a noncotton zone for a radius of 2 miles about the single field is recommended, together with a continuation for 1922 of the noncotton zones and regulated zones of 1921.[1]

This action does not go as far in the way of noncotton zones as might be desirable but had in view the desirability of reducing as much as possible the reimbursement cost involved in such zones, and also the possibility that later developments might indicate the need of additional noncotton and regulated zones. The action, however, gives large regulated zones which will greatly lessen the chance of the spread and there is a fair possibility with respect to the new points of infection that the small zones provided for, with the clean-up which has already been made, will be effective in eradicating the pest at these points.

As indicated above, the invaded area in western Texas and New Mexico will be continued under strict regulation as to movement of cotton and cotton seed.

PINK BOLLWORM CONTROL IN LOUISIANA.

As indicated in the summary of the pink bollworm situation issued in connection with the Dallas conference (pp. 126–130), so far as now known there is no actual pink bollworm remaining in the State of Louisiana and the control methods which are being continued are merely precautionary. With the exception of the district about Shreveport, all noncotton zones in that State will be discontinued for 1922. The invaded area in the three parishes in the southwestern part of the State will be continued, however, as a regulated zone for 1922 and a regulated area will be maintained surrounding the noncotton area at Shreveport. The regulated areas maintained for the past two years about the towns of Alexandria, Broussard, Gretna, and Eunice will be released, inasmuch as no pink bollworm infestation has developed at these points. Nevertheless, field inspections will be continued as to these areas as a precautionary measure. The official orders issued by the Department of Agriculture of Louisiana, with respect to this action, are reproduced in this number (pp. 136–138).

PINK BOLLWORM CONTROL IN NEW MEXICO.

Quarantine order No. 3 of the State of New Mexico, to prevent the introduction and dissemination of the pink bollworm of cotton, and the regulations thereunder, are being enforced in very close cooperation with the plant quarantine inspectors of this board.

They provide for control of growing cotton and of the disposition and transportation of its products. Seed must be heated to a temperature sufficiently high to kill the pink bollworm, or crushed at a designated mill. The Federal pink bollworm quarantine No. 52 is recognized and made a part of the New Mexico regulations. A hearty spirit of cooperation is being shown on the part of planters, mill men, and others, and the provisions are being rapidly worked

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[1] These recommendations were made effective by proclamation of Gov. Pat Neff Jan. 11, 1922 (pp. 132–135).

out and adopted for the disinfection by heat of planting seed. The administration of this quarantine has been delegated by the governor of the State to the board of regents of the State Agricultural College at Las Cruces. This board has designated Mr. Sidney D. Smith, one of the principal plant quarantine inspectors of the Federal Horticultural Board in the western district, to represent the board of regents in all matters pertaining to the enforcement of this quarantine. This quarantine order (No. 3) and the regulations thereunder are reproduced on pages 138–140 of this number.

PINK BOLLWORM SCOUTING WORK.

The scouting conducted each year since 1918 to determine the possible presence of the pink bollworm represents a very large element of the field work. It is prosecuted chiefly from July and August throughout the winter and extends to all cotton-producing States which are under any known risk of having been reached by this pest. A summary of this work was given in the last issue of these announcements (January–June, 1921, pp. 21–23). The inspectors available for this work vary from 50 to 75, the number being considerably added to in the fall and winter when field determinations of infestation can be most efficiently made. This inspection has been directed primarily to points reached by the movement of possibly infested seed or lint from Mexico, Texas, or other invaded States prior to the discovery of such infestation and the enforcement of quarantines. As the basis for this work all shipping records have been carefully studied to determine and trace all such movement. As a result of these surveys the board feels fairly confident that any new or additional infestations by the pink bollworm in the States already invaded will be promptly discovered and also feels that these surveys have largely eliminated any fear of existing infestation by this pest in States other than those already invaded.

An additional feature of this work is the scouting along the border in Mexico as a basis for the border quarantine control. So far no infestation by pink bollworm has been determined in the fairly important cotton district opposite Brownsville in the vicinity of Matamoros, Mexico. The known infestations in Mexico near the border, namely, opposite Del Rio and in the Great Bend and Juarez districts, involve regions of very small and irregular cotton production, and with adequate cooperation on the part of Mexico these undoubtedly could be cleaned up and eliminated as sources of risk to Texas.

CLEAN-UP OF COTTON FIELDS, 1921.

A total of 4,263 acres was cleaned by the removal and burning of standing cotton in connection with the crop of 1921, involving an expense of a little over $20,000. Most of the area cleaned is in the old Trinity Bay district. In connection with the new infestations in Ellis County, 802 acres were thus cleared and in Grayson County 721 acres. Practically all of this work of clearing cotton fields, either invaded or under suspicion, was completed during the month of October, 1921. Due to changed labor and other conditions, it has been possible to do this work at a very much lessened cost per acre as compared with the first years of pink bollworm work. The shortage of labor in the war period necessitated the organizing of labor gangs and their transportation and subsistence. The work of 1921 has been largely carried out through contract with the owner of the land, a system made possible by the greater local availability of labor. The cost this year has varied from $3.08 per acre to about $6 per acre, or an average of about $4.70 per acre, as contrasted with an average cost of about $9 in the first years of the work. No clean-up work was undertaken in 1921 in the regulated zone in western Texas and New Mexico, the expense of

such clean-up not being justified except in connection with an effort to eradicate the pest and as a preliminary to the establishment and maintenance of non-cotton zones.

MEXICAN BORDER CONTROL.

The border control work to prevent entry of the pink bollworm from Mexico was rather fully described in the last number of these announcements. The fumigation house at Nogales has been completed and has been in operation since December 1, 1921. The total fees collected and turned into the Treasury, covering the actual cost of chemicals and labor involved, from the beginning of the service (October 1, 1919) to June 30, 1921, are $96,299.50; and from July 1 to December 31, 1921, $79,933.00, a grand total of $176,232.50.

RESEARCH WORK IN MEXICO.

As indicated in the previous number of these announcements (p. 4), research work on the pink bollworm in the Laguna, Mexico, was resumed early in the year 1921. This work has involved variety tests, poisoning tests, disinfection of seed by heat, study of other possible host plants, distance of normal flight of the pink bollworm moths, larval longevity, effect of seed storage on pink bollworm mortality, studies to determine per cent of survival of larvæ under different field conditions, i. e., above and below soil, the amount of damage occasioned by the pink bollworm under different field conditions, and the results of actual control efforts in the Laguna. Much of this work is well advanced, and very important data have been secured, and it is expected that later a full report will be submitted for publication.

PINK BOLLWORM IN THE WEST INDIES.

The determination of the occurrence of the pink bollworm in the Island of St. Croix, one of the Virgin Islands belonging to the United States, and also in the Islands of St. Kitts and Montserrat in the West Indies, made it desirable, in view of the close commercial relations, interisland and with the United States, to have accurate information as to the extent of the foothold of this pest throughout the West Indies. For this purpose Mr. August Busck, entomological assistant of the board, spent several months (July-November) in this investigation, which included the British and Dutch Guianas, Trinidad, and the islands northward, including the Virgin Islands, and also Porto Rico, Santo Domingo, and Cuba.

The pink bollworm was determined as occurring from Montserrat north and west, including the British and Virgin Islands, and in Porto Rico and Santo Domingo. No infestation was found south of Montserrat. The fairly brief survey of Cuba did not result in the detection of this pest in that island. It was hoped that the pink bollworm would prove to be limited to a few of the smaller islands and that it would be practicable to recommend efforts at extermination—efforts, in fact, which the insular authorities—British and American—either had already undertaken or were willing to undertake. The determination, however, of the wide infestation of this pest in Porto Rico and of its having obtained a foothold in Santo Domingo, together with the cultural and vegetative conditions of these two larger islands and the abundance of wild cotton growing on them, made it, in the judgment of the experts of the department, inadvisable to recommend a general campaign of eradication. It was realized that unless it was possible to eradicate the pest from these larger islands it would be very difficult, if not impossible, to prevent repeated reinfestation of the smaller islands. Control in the smaller islands becomes, therefore, a local matter to be administered, if this is possible at a reasonable cost, by the islands concerned. These conclusions were the outcome of a

general conference held on the subject by the board in Washington, December 20.

The infestation in the West Indies apparently came from an importation of Egyptian cotton seed in 1911–12 into the Island of St. Croix then under Danish control by the director of the island experiment station and the later distribution from this point of planting seed to other islands.

The existing quarantines on account of the pink bollworm now protect the United States from movement of cotton, cotton seed, etc., from the West Indies, including the American islands.

THE EUROPEAN CORN BORER.

Following the hearing on June 28, 1921, to consider bringing under restriction the importation from Canada of various products in addition to corn known to be possible means of spreading this pest, the foreign quarantine on account of the European corn borer (No. 41) was revised, enlarging its scope as indicated. The news item describing these changes and the revised quarantine are reproduced on pages 147–150.

During the summer (1921) the corn borer was found to be established on a series of islands crossing Lake Erie, evidently a spread from the Ontario section, and possibly crossing in this manner, to have effected a foothold in 26 Ohio townships bordering the lake, extending to within about 60 miles of the Indiana line. A similar infestation, probably originating from the western New York area, was determined in the Pennsylvania district adjacent to the lake, involving 11 townships. The old infested area in western New York now numbers 14 townships.

Following the determination of the infestation of these new districts, an important conference on the European corn borer to discuss future policy was conducted under the auspices of the United States Department of Agriculture at Sandusky, Ohio, September 15 and 16, participated in by the State entomologists and agricultural control officials of many of the Eastern and Middle States.

Following this conference a formal hearing was called for October 11 at Washington to consider the necessary modification of the Federal quarantine on account of this pest. As a result of this hearing the domestic corn borer quarantine (No. 43) was revised effective November 15, 1921, to include the new areas of invasion and the regulations were somewhat modified. The text of the notice of hearing, quarantine, and informing statements issued in connection with these, are reproduced on pages 140–147.

The Federal and other representatives of the several States urged very strongly the continuation of the corn borer quarantine, on the basis of the infested areas rather than on a regional basis, and urged the continuation for 1922, of the Federal appropriation on account of the corn borer for 1921, namely, $275,000. Assurances were given by delegates from most of the States that Government money spent in their States would be matched for the work by an equal amount of State funds.

THE GIPSY AND BROWN-TAIL MOTH QUARANTINE REVISED.

Ten towns in New Hampshire, Massachusetts, and Rhode Island were transferred from the lightly infested gipsy moth area to the generally infested gipsy moth area by amendment to the regulations of quarantine No. 45. This action was taken December 23, 1921, effective on and after January 1, 1922 (pp. 150–151).

The new areas of infestation by the gipsy moth determined in 1920–21 in New Jersey, New York, and Pennsylvania remain in the control status indicated in the last number of these announcements (January–June, 1921, pp. 61–64).

THE JAPANESE BEETLE QUARANTINE.

The increasing spread of the Japanese beetle in Pennsylvania and New Jersey necessitated an extension of the areas under restriction and a corresponding revision of the regulations under the quarantine (No. 48) in accordance with the provisions in the quarantine for such extension. The revised quarantine, effective on and after January 1, 1922, and the news statement issued in connection therewith, are reproduced on pages 151–155.

THE MEXICAN BEAN BEETLE QUARANTINE RAISED.

As a result of surveys early in the summer of 1921 it developed that the Mexican bean beetle not only had invaded a much wider area in Alabama than had been previously determined but that it was established also in the States of Georgia, Tennessee, Kentucky, and South Carolina, indicating a possibly fairly general dissemination throughout the South far beyond any hope of extermination or even effective quarantine control, and with the approval of the States concerned the Federal quarantine on account of this insect, promulgated April 8, 1921, was revoked July 23, 1921 (pp. 155–156).

QUARANTINE ESTABLISHED AGAINST THE SATIN MOTH.

The satin moth, a newly imported pest from Europe, attacking principally poplars and willows, was made the subject of quarantine action. The quarantine covers a limited area in the States of New Hampshire and Massachusetts. The explanatory press notice and the text of the quarantine are reproduced on pages 157–159.

THE CAMPHOR SCALE.

A new subject for possible Federal quarantine action is the so-called camphor scale, *Aonidia duplex* Ckll., which has recently become established in the city of New Orleans, La., and possibly elsewhere in that general region. This scale insect is an oriental species which has been a good many times intercepted on importations from transpacific countries but which has apparently never hitherto obtained any really serious foothold in the United States or demonstrated qualities of particular harmfulness. The sudden outbreak in New Orleans, however, illustrates that a lack of record of harmfulness of a scale pest is no guarantee against its development into a pest of major importance under favoring conditions. Within a very short period this scale insect has attacked a large list of plants in New Orleans, including many of great agricultural importance, such as citrus plants, persimmons, grape, pecan, plum, pear, fig, etc., as well as most ornamentals, and has developed an alarming destructiveness. The study and control of this new pest is being actively undertaken by the Bureau of Entomology in cooperation with the Louisiana State Department of Agriculture, and for the present, in the belief of the Bureau of Entomology, a Federal quarantine is not necessary. The State quarantine already established by the Department of Agriculture of Louisiana is being operated effectively in cooperation with the United States Department of Agriculture, and includes provision for the inspection and, if necessary, fumigation of any florist stock or similar material leaving New Orleans for outside points. Neither the Bureau of Entomology nor the Federal Horticultural Board has any funds to apply to the enforcement of Federal restrictions.

In connection with the estimates for the next fiscal year, $15,000 is requested for investigation and control of this new pest.

THE NURSERY STOCK, PLANT, AND SEED QUARANTINE.

A summary of the operation of this quarantine, with tables indicating importations thereunder, is given in the annual report of the board for 1921 (pp. 13 and 14).

HEAVY INFESTATION OF FRENCH FRUIT AND ROSE STOCKS.

In the last number of these announcements reference was made to the unusual numbers of brown-tail moth nests arriving with French fruit and rose seedlings. The importing season yielded a total of 182 such nests, found in connection with some 41 shipments. This compares very unfavorably with the record for the preceding nine years during which only 63 nests altogether had been found. An effort was made to safeguard these shipments by fumigation under vacuum. The results of these experiments indicated, however, that such fumigation was ineffective at low winter temperatures and that unless the shipments could be brought to a temperature of 50° F. or upward, disinfection by this means was unreliable. Such fumigation has therefore been discontinued and both the French exporters and the American importers of such seedlings have been warned that infested shipments will be refused admittance. Assurances have been received from the French inspection service that a radical improvement of the inspection can be counted on for the future.

EXPLANATION OF PROVISIONS FOR ENTRY OF PLANT NOVELTIES AND PROPAGATING STOCK UNDER REGULATION 14, QUARANTINE 37.

Circular letter HB–105, explaining the provisions of plant entry under quarantine 37, was revised and reissued as of date January 1, 1922, but is included in this number of the announcements because actually prepared and authorized in 1921. It embodies a brief statement of the necessity for quarantine 37 and a short description of the provisions under the quarantine for the entry of any necessary plant, and explains in detail the conditions governing the entry of new varieties and necessary propagating stock under regulation 14. This circular letter is reproduced on pages 168–171 of this number.

MAIL ENTRY OF IMPORTS UNDER REGULATION 14, QUARANTINE 37, HEREAFTER PERMITTED.

The importation by mail has hitherto been prohibited of plants and seeds for propagation, except field, vegetable and flower seeds and importations made by or for the Department of Agriculture. Inasmuch as importations made by special permit under regulation 14, quarantine 37, are required to be addressed to the Federal Horticultural Board, United States Department of Agriculture, and are under complete control of the Department until they are passed and distributed to destination, and are bonded and controlled for a varying period thereafter, they can properly be considered as complying with the post office order limiting mail importations of plants other than as indicated to those addressed to and intended for this Department. By arrangement with the customs service and the Post Office Department, permission for importation through the mails of special permit material under regulation 14 will hereafter be authorized on request when warranted by the nature and amount of the proposed shipment. This order is reproduced on page 172. It should be distinctly understood that mail entry of plants and seeds for propagation is strictly limited to special permit material under regulation 14

and to field, vegetable and flower seeds under regulation 2, and is prohibited as to commercial or other entry under regulations 3 and 15 of quarantine 37.

RESTRICTIONS ON COMMERCIAL ENTRY TO BE MAINTAINED.

A delegation of nurserymen from Holland, accompanied by Dr. J. Ritzema Bos, chief of the phytopathological service of Holland, conferred with the board June 28, 1921, with the object of having the restrictions on the commercial entry of ornamentals from Holland modified. The representations made by this delegation were not, in the judgment of the board, sufficient to warrant any change of the quarantine or enlargement of the possibilities of importation. It was pointed out that any importation of plants from foreign countries carried a very known and definite risk of the introduction of new plant enemies, that the object of the quarantine was to reduce such importations to the minimum of plants determined as essential to the development of American agriculture and horticulture, and that, therefore, mere introductions for commercial purposes of plants which were not necessary or could be adequately produced in this country would be foreign to the purpose of the quarantine.

HORTICULTURIST ADDED TO BOARD'S STAFF.

In connection with all requests for special permits under regulation 14 for the importation of new varieties of plants and necessary propagating stock, the board has adopted the policy from the beginning of issuing such permits on the recommendation and advice of the experts of the Bureau of Plant Industry as approved by the chief of that bureau. The burden of this work has been rather heavy and as a means of facilitating the examinations and lessening the bureau's work, the board has added to its staff Prof. David Lumsden, a horticulturist of wide professional and practical experience. Prof. Lumsden's duties will be to cooperate with the Bureau of Plant Industry in determining all horticultural matters and particularly in making determinations of the availability of plants in this country in connection with the issuance of special permits under regulation 14. All such requests, however, will, as formerly, be reviewed and approved by the Bureau of Plant Industry before the permits are issued.

THE POTATO WART DISEASE.

The only new infestations by the potato-wart disease determined this year are some 12 gardens near Frostburg in western Maryland which lie practically between the western Pennsylvania and West Virginia infested districts and are similarly coal-mining sections. Some thousand individual garden plats in these three States have been determined during the past three years as infested, but the area of these plats aggregates less than 100 acres. The efficient quarantines maintained by the States concerned continue to render unnecessary the promulgation of a Federal quarantine.

The research and control work with respect to this disease under a Federal appropriation has been carried on as hitherto, in cooperation with the Bureau of Plant Industry and with the authorities of the States involved. The extensive surveys during the years 1920 and 1921 have pretty well eliminated chance of country-wide infestation at this time by the potato-wart disease and there is strong reason to believe, therefore, that the present limits of the disease in this country have now been pretty well determined. During 1921 nearly 6,000 gardens were examined by the Federal inspectors in the three States concerned, and some 5,000 gardens were examined in the western part of Pennsylvania by inspectors of that State.

An important conference of State and Federal experts connected with the potato-wart work was held by the board November 8, 1921. The experts reported that their studies of the disease indicate that it is not so controlled by temperature and soil conditions that it may not spread and become a menace to every potato-growing district in the country, in the South as well as in the North. The experts were also of the opinion that extermination is not possible, that the disease is bound to spread, and that the solution lies in the development and planting of immune varieties, but that it is desirable to delay the spread of the disease as long as possible by the enforcement of reasonable quarantine restrictions.

The general research work in connection with the study of the disease—soil and climatic features, soil sterilization, and the breeding and determination of new immune varieties—has been continued. The immunity to the disease of many different varieties of potatoes has been indicated, including both European and American sorts, but no immune varieties have been determined for the very important rural group which includes possibly the most desirable types of potatoes for northern and central districts. The total of all varieties and seedlings tested by the department yields 143 immune varieties as against 182 susceptible varieties.

In response to requests for a modification of the quarantine which now prohibits the importation into the United States of potatoes from Ireland, a letter was addressed by the Secretary of Agriculture under date of July 5 to the honorable the Secretary of State, for transmittal to the British Government, indicating the reasons for the department's not desiring at this time to modify the existing potato quarantine. This letter is reproduced on page 160 in this number of the announcements. Similar correspondence was also had with the Dutch authorities.

THE WHITE PINE BLISTER RUST.

The white pine blister rust was determined late in 1921 as fairly well established near Vancouver in British Columbia, from whence evidently it had spread into the northwestern corner of the State of Washington. This development will necessitate a revision of the domestic quarantine on account of this disease, and a public hearing has been called for January 23, 1922, to consider such revision (pp. 160–161).

On the recommendation of the Bureau of Plant Industry of the department, the Federal Horticultural Board has authorized a department detention station at Mandan, N. Dak., for the propagation of gooseberries and currants. The object is to make provision for distribution west of the pine blister rust quarantine line under proper safeguards of otherwise unavailable varieties of these plants. This agreement is reproduced on pages 161–162 of this number.

The enforcement of the existing blister rust quarantine has led to a number of prosecutions, reports of which are given elsewhere in these announcements.

THE CITRUS FRUIT QUARANTINE.

The notice of public hearing called for July 19, 1921, to consider the advisability of extending the citrus fruit quarantine (No. 28) to Australia, Tasmania, and New Zealand, together with the informing press statement issued in connection therewith, is included in the last number of these announcements (January–June, 1921, pp. 87–88). Quarantine action as a result of this hearing, which was duly conducted, has been deferred to give opportunity to secure additional information from the countries concerned.

The existing citrus fruit quarantine on account of the canker disease promulgated June 27, 1917, covers eastern and southeastern Asia, the Malayan Archipelago, Philippine Islands, Oceania (except Australia, Tasmania, and New Zealand), Japan (including Formosa and other islands adjacent to Japan), and the Union of South Africa.

During the past year citrus canker has been found on several occasions on grapefruit and oranges from China and India intercepted at the port of Seattle.

THE UNITED STATES QUARANTINED TO PROTECT HAWAII.

A Federal quarantine to protect Hawaii against the entry of injurious plant pests, especially the sugar cane borer, the alfalfa weevil, the cotton boll weevil, the papaya fruit fly, and certain enemies of the fruit of the avocado, was promulgated July 22, 1921, effective October 1, 1921. The notice of public hearing and news items issued with respect to this quarantine, together with the quarantine, are reproduced on pages 162–166.

PORT INSPECTION NOTES.

Some indication of the growth of the inspection work on the Mexican border and at maritime ports of entry may be gained from the records given below. The table giving the interceptions at maritime ports for the last six months indicates the large need for this service.

Number of pieces of contraband intercepted at maritime ports of entry July 1–December 31, 1921.

[Found in passengers' baggage, crews' quarters, ships' stores, etc.]

	Avocados.	Citrus fruits.	Corn.	Cotton.	Mangoes.	Plants.	Potatoes.	Sugarcane.	Sweet potatoes.	Total.
Baltimore [1]	57	2			13	17			9	98
Boston			10	1		546		58	4	619
Mississippi ports		63	1		18	578				660
New Orleans	355	339	5	12	28	110	17	65	138	1,069
New York [2]	132	93	30	1		3,333	19	322	645	4,575
Philadelphia	51	157	2		6	30	1	10	34	291
Portland		1				28	1			30
Seattle		80				12			7	99
Total	595	735	48	14	65	4,654	38	455	837	7,441

[1] Begun Apr. 1, 1921. [2] Begun June 15, 1921.

The great increase in the Mexican border service, indicated in the following statement, has been occasioned by the growth of the traffic with the United States following more settled conditions in Mexico. The increase in the maritime ports interceptions during the last six months of 1921 was occasioned in part by the extension of ship inspection to Boston, New York, Philadelphia, and Baltimore, and to the additional southern ports of Gulfport and Pascagoula. Infestation has often been found in connection with these interceptions, the more important instances of which up to the end of the fiscal year, are listed in the annual report of the board for 1921 (pp. 15 and 16).

NUMBER OF FREIGHT CARS INSPECTED AND FUMIGATED AT MEXICAN BORDER PORTS.

Period.	Inspected.	Fumigated.
Oct. 1, 1919, to June 30, 1920	15,058	7,797
July 1, 1920, to June 30, 1921	25,843	15,490
July 1, 1921, to Dec. 31, 1921	22,007	19,977
Total	62,908	43,264

NUMBER OF PIECES OF CONTRABAND INTERCEPTED.

AT MEXICAN BORDER PORTS.

Period.	Inspected.
Jan. 1, 1920, to June 30, 1920	5,028
July 1, 1920, to June 30, 1921	28,050
July 1, 1921, to Dec. 31, 1921	31,592
Total	64,670

AT MARITIME PORTS.

July 1, 1920, to June 30, 1921	1,119
July 1, 1921, to Dec. 31, 1921	7,441
Total	8,560
Total number of pieces of contraband intercepted at all ports from which we have complete records	73,230

Means for the steam sterilization of broom corn have been provided in Boston by one of the vacuum fumigation plants erected for the fumigation of foreign cotton. With the equipment installed, it is possible to raise the temperature in one of these large tanks considerably above 200° F., and steam sterilization is now possible of broom corn and other articles. Steam sterilization is undoubtedly the most effective means of destroying insects and its use is desirable wherever no serious harm to the product disinfected results.

After approximately nine months of experience at Norfolk, Va., it was determined that the work was not of sufficient importance to warrant the continuance of an inspector at that port, and the inspector was transferred March 28, 1921, to Baltimore, Md.

The local customs officers at Charleston and Savannah have recently been authorized by the board to inspect and certify, as a condition of entry at these ports, the classes of restricted bagging for which disinfection is not required.

BOARD PARTICIPATION AT VARIOUS MEETINGS.

On invitation the board has participated in various meetings of associations and other bodies to give information on the Federal plant quarantine activities. In this way Dr. Kellerman represented the board at the meetings of the Illinois Nurserymen's Association held at Chicago, February 9–10, 1921. He also attended the annual meeting of the American Association of Nurserymen at Chicago on June 22–23, 1921.

O. A. Pratt and Frederick Maskew attended the meetings of the Western Plant Quarantine Board in Victoria, British Columbia, June 7–10, 1921, as representatives of the Federal Horticultural Board.

R. Kent Beattie represented the department at the meetings of the California Association of Nurserymen, the California Avocado Association, and the State Fruit Growers' Association, Los Angeles, October 20–24, 1921.

The chairman attended the meeting of the Association of Secretaries and Commissioners of Agriculture in Chicago, November 28, 1921, to discuss the corn borer situation.

Messrs. Kellerman, Sasscer, and Weiss attended the meeting of the horticultural inspectors in connection with the meetings of the American Association for the Advancement of Science at Toronto, at the end of December.

QUARANTINE AND OTHER OFFICIAL ANNOUNCEMENTS.

THE PINK BOLLWORM.

TEXAS PINK BOLLWORM LAW OF 1921.

THE PINK BOLLWORM LAW OF TEXAS, PASSED BY THE FIRST CALLED SESSION OF THE THIRTY-SEVENTH LEGISLATURE AND APPROVED BY THE GOVERNOR SEPTEMBER, 1, 1921.

A BILL To be entitled, An act to prevent the introduction into the State of Texas of the destructive cotton pest, *Pectinophora gossypiella,* Saunders, known as and hereinafter referred to as the pink bollworm and to control and eradicate such insect pest when and where discovered in this State; defining the pink bollworm and defining cotton or cotton products, declaring the policy of the State in its efforts to control and eradicate the pink bollworm; providing for the supervision of the planting and growing of cotton or the prevention of the growing of cotton near the Texas border adjacent to infestation of the pink bollworm without the State of Texas; authorizing the Governor to issue quarantine proclamation against cotton products and other things liable to carry the pink bollworm, originating in infested areas outside the State of Texas; providing for emergency quarantine against cotton or cotton products contaminated or infested with such pests; providing for the destruction of cotton, cotton products or cotton fields infested or contaminated with pink bollworm and for the appraisal and payment for such destruction; providing for the supervision of the growing of cotton or the prevention of the planting of cotton in areas within this State infested or contaminated with pink bollworm; providing for the payment by the State of damages to persons prevented from producing cotton and defining the method of adjusting such claims as may arise; providing for the appointment of a compensation claim board and defining its duties; providing for the appointment of a pink bollworm commission and defining its duties; providing for the inspection of cotton and cotton products; making it the duty of the Commissioner of Agriculture to make adequate investigation to determine the presence of the pink bollworm within this State and giving him authority to employ inspectors and other assistants, providing a penalty for the violation of the provisions of this act; providing for the change of venue in criminal cases arising under this act; making it the duty of the Commissioner of Agriculture to cooperate with the Secretary of Agriculture of the United States in any measure authorized and to be undertaken to prevent the introduction of the pink bollworm into Texas; making an appropriation: repealing all laws in conflict with this act; providing for the continuation of such measures for control and eradication of the pink bollworm as are in force when this law becomes effective, and declaring an emergency.

Be it enacted by the Legislature of the State of Texas:

PINK BOLLWORM A MENACE.

SECTION 1. The *Pectinophora gossypiella,* Saunders, known as the pink bollworm, is recognized as a destructive pest of cotton, and is hereby declared a public nuisance and a menace to the cotton industry, and its eradication is a public necessity.

PINK BOLLWORM DEFINED.

SEC. 2. The "pink bollworm" in this act shall mean the insect in its various stages of development, including the egg, larval, pupal and adult stages.

COTTON DEFINED.

SEC. 3. The term "cotton" or "cotton products" in this act shall mean cotton in the seed, ginned lint cotton, seed, hulls, cotton in the bolls, cotton stalks, and any and all character of cotton products except oil and meal.

POLICY OF THE STATE.

SEC. 4. It is hereby declared the policy of the State in endeavoring to control and eradicate the pink bollworm to employ all such methods as scientific research demonstrates to be successful and as may be sanctioned by constitutional warrant, including inspection of cotton plants in the fields, or of cotton and cotton products wherever stored; the quarantine and fumigation of cotton and cotton products found to be contaminated; supervision of the growing of cotton in areas known to be contaminated; destruction of infested fields of cotton, or cotton, or cotton products; and the prevention of planting of cotton in areas where infestation has been found.

PINK BOLLWORM OUTSIDE OF TEXAS.

SEC. 5. If the Commissioner of Agriculture of this State determines, through his cooperation with the Secretary of Agriculture of the United States, that the

pink bollworm exists outside of Texas but adjacent to the Texas border, he shall certify that fact to the Governor, who shall thereupon cause the convening of the Pink Bollworm Commission appointed as hereinafter provided for, which commission shall give notice of, and hold, a hearing in the manner provided in Section 8 hereof at some central and easily accessible point in the county or counties in this State along the boundary adjacent to such infestation, and investigate into the danger to the cotton industry of Texas from such infestation adjacent to the Texas border and make such recommendation to the Governor as they deem sufficient to the protection of the cotton industry of the State. Should this report express the conclusion that it is dangerous to the cotton industy of Texas that cotton be grown in this State along the boundary adjacent to such infestation, the Governor shall thereupon proclaim such area as may be set out in said report a noncotton zone, in which it shall be unlawful to plant, cultivate or grow any cotton for such period as the proclamation may specify; and if such report indicates that it will be safe to grow cotton under rules and regulations within such zone adjacent to the infestation outside of Texas, the Governor shall thereupon issue his proclamation declaring it unlawful to grow cotton within such area as may be recommended by the Pink Bollworm Commission, except and under such rules and regulations as the Commissioner of Agriculture shall promulgate. Should the report of the Pink Bollworm Commission indicate that it may be dangerous to the cotton industry of this State to allow the free movement of contaminated material from such infested territory into this State, the Governor shall thereupon proclaim a quarantine against such infested territory, and thereafter it shall be unlawful to import into Texas from such quarantined territory any thing or substance liable to be contaminated with pink bollworm, and it shall be the duty of the Commissioner of Agriculture of this State to maintain a rigid inspection of articles liable to be contaminated which are being carried from such quarantined territory into the State of Texas. *Provided, however*, Before recommending the establishment or continuance in any county in this State bounded by an international boundary line, of a noncotton zone, under this or any other section of this act, the Pink Bollworm Commission shall give careful consideration to the conditions existing, or likely to exist, on the non-Texas side of said boundary line, and the evidence concerning such conditions shall be such as to reasonably show that the establishment of a noncotton zone in said county will effectively protect the cotton industry of this State against the further spread of the infestation.

EMERGENCY QUARANTINE.

SEC. 6. If the pink bollworm shall be found in any gin, cotton seed oil mill, cotton seed warehouse, compress, or transportation vehicle in the State, or in any field of cotton, the Commissioner of Agriculture of the State shall immediately certify that fact to the Governor, who shall proclaim a special emergency quarantine surrounding the known location of the pest to such extent as may be determined sufficient to prevent the spread of the pink bollworm and it shall be unlawful for any person or persons to ship any cotton or cotton products of any kind from such quarantined district, or transport any car, vehicle, or freight, or any other article liable to carry the pink bollworm from the quarantined area through, or to any other point in the State, except and under such rules and regulations as the Commissioner of Agriculture shall promulgate; such emergency quarantine shall continue in full force and effect until such time as a hearing, as provided for in this act, can be held by the Pink Bollworm Commission provided for herein.

AUTHORITY TO DESTROY COTTON.

SEC. 7. When it is deemed necessary to the protection of the cotton industry of Texas that the Commissioner of Agriculture shall destroy cotton, cotton products, or fields of cotton in which the pink bollworm shall have been found or which are probably contaminated by being near infestation of the pink bollworm, he shall report such condition to the Governor, setting out in detail the area or amount of cotton or cotton products to be destroyed. The Governor shall thereupon declare such cotton or fields of cotton a public menace. Before the destruction of such cotton or cotton products the Compensation Claim Board hereinafter provided for shall go upon the premises and report to the Commissioner of Agriculture the value of the fields of cotton or cotton products to be destroyed. The Commissioner of Agriculture shall then be empowered to use all authority requisite to the complete destruction of such cotton, cotton products or fields of cotton to prevent the spread of the pink bollworm from such localities. The Commissioner of Agri-

culture shall certify to the fact of such cotton products or fields of cotton having been destroyed and shall file such report and certificate with the State Comptroller, who shall issue his warrant upon the State Treasurer for such sum as may be declared just and due.

REGULATED AND NON-COTTON ZONES.

SEC. 8. Whenever the Commissioner of Agriculture of this State shall deem it necessary to the protection of the cotton industry of Texas that the growing cotton within any area within the Sate, except as provided for in Sections 5 and 6 of this act, be placed under supervision, or that cotton growing be prohibited as a means of aiding in the control and eradication of the pink bollworm, he shall cause to be made a thorough examination of such area by a competent and experienced entomologist, who shall, after going upon the premises and after making an examination in person, report the result thereof to the Commissioner of Agriculture. Should this report express the conclusion that the pink bollworm exists within the territory under investigation, the Commissioner of Agriculture shall certify this report to the Governor, who shall cause the Pink Bollworm Commission, hereinafter provided for, to hold a hearing at some central and easily accessible point within the area under investigation; due notice of the time and place of such hearing shall be published in some newspaper in or near the county or counties under investigation, at least ten days before such hearing. It shall be the duty of the Commissioner of Agriculture to present to the Commission a statement setting forth the following facts:

1. The name of the entomologist making the examination on behalf of the State Department of Agriculture.
2. The date when such examination was made.
3. The locality where the pink bollworm is alleged to exist.
4. Any other information deemed necessary by the Commission for the discharge of its duties under the provisions of this act.

Such statement shall be verified by oath of the person making the same and shall be filed and preserved in the office of the Commissioner of Agriculture and be open to the inspection of the public. It shall be the duty of the said Pink Bollworm Commission to make a report to the Governor immediately after the hearing. Should this report and recommendation be for the prevention of the planting of cotton in any area and for the establishment of a noncotton zone, such recommendation shall specify the area to be embraced in the proposed noncotton zone. Upon the receipt of this report, it shall be the duty of the Governor to declare the growing of cotton within such area as may be recommended by the Pink Bollworm Commission a public menace, and thereafter it shall be unlawful to plant, cultivate or grow cotton, or to allow cotton to grow within such zone, such proclamation of the Governor to remain in effect until the Pink Bollworm Commission, herein provided for, shall have certified that the condition of menace no longer exists. In the event of the establishment of any noncotton zone as authorized by this act, (or under the provisions of any previous acts on this subject)[1] all persons prevented from producing cotton in the noncotton zones shall be entitled to receive compensation from the State in the measure of the actual and necessary losses sustained thereby. The Compensation Claim Board, herein provided for, shall have full power and authority to determine the amount of compensation to such persons. In determining the actual and necessary losses, the Compensation Claim Board shall take into consideration the value of the average yield of cotton and other crops second in economic importance thereto in that vicinity; the total amount of land planted to crops during the year for which compensation is claimed; the percentage of such land customarily planted in cotton in that vicinity, and such other factors as they deem essential. The words "cultivated crops" as used above shall not be construed to include any small grain crops, hay or pasture which are not cultivated during the growing season. *Provided*, That no person shall be entitled to compensation who does not in good faith obey the proclamation of the Governor establishing such noncotton zone. Should the report of the Pink Bollworm Commission express the conclusion that it will be dangerous

[1] The expression "or under the provisions of any previous acts on this subject" was an amendment adopted by the house as shown on page 1 of house journal for Aug. 14, 1921. The Senate concurred in all house amendments. By some oversight this expression was left off the final draft of the law. Since it was clearly the intent of the legislature that this expression should be a part of the law, it has here been parenthetically added.

to the cotton industry of Texas to permit the growing of cotton within such district under such rules and regulations as it shall be deemed adequate to prevent the spread of the pink bollworm, it shall be the duty of the Governor to proclaim such area as may be set out in the report of the Pink Bollworm Commission a regulated zone, in which it shall be lawful to plant, cultivate and market cotton under such rules and regulations as shall be promulgated therefor by the Commissioner of Agriculture, which may include the planting of seed from noninfested territory, ginning at designated gins, milling or disinfecting of all seed produced within such zone, marketing, cleaning of fields, and such other rules as may be found necessary; provided that no ginner shall be authorized to gin cotton from regulated zones unless he shall disinfect all seed under such rules as the Commissioner of Agriculture shall prescribe. Such proclamation of the Governor, establishing such regulated zone shall remain in effect until the Pink Bollworm Commission, herein provided for, shall have certified that the condition of menace no longer exists.

COMPENSATION CLAIM BOARD.

SEC. 9. As soon as practicable after the passage of this act the Governor shall appoint a Compensation Claim Board for the State, who shall serve until relieved therefrom by the Governor, whose duty it shall be to determine in the manner herein provided the measure of compensation due persons prevented from growing cotton and the damages sustained by persons having cotton condemned and destroyed as provided for herein. The said Board shall be composed of three citizens of the State residing outside any area under quarantine under the provisions of this act, at least two of whom are actually engaged in the production of cotton. Before entering upon their duties, the members of the Board shall take the constitutional oath of office required of officers of the State, and shall organize by electing one of its members chairman and the Commissioner of Agriculture shall act as exofficio secretary. They shall have authority to administer oaths for the purpose of taking testimony. The concurrence of two members of the Board shall constitute legal action. The members of the Board shall receive as compensation the sum of five ($5) dollars per day and actual necessary traveling expenses when engaged in the performance of their duties. The Compensation Claim Board shall conduct a public hearing in the county or counties from which the claims for compensation have been filed, due notice of which hearing shall be given by the publication in some newspaper published in or near the county or counties in which the claimant resides, not less than ten days before the date of such hearing, and by mailing from the office of the Commissioner of Agriculture a letter to each claimant, not less than ten days before the date of such hearing, which notices shall state the time and place of each hearing. Every such claim for compensation from the State shall be made under oath, attested by two citizens of the county in which the claimant resides, upon blanks to be furnished by the Commissioner of Agriculture, and except when the claim is for compensation for losses under previous acts, shall be filed in the office of the Commissioner of Agriculture not later than November 15 of the year for which claim for compensation is made. Claims for compensation or losses incurred under previous acts shall be filed within ninety days after this act takes effect, but no such claims shall be paid out of any appropriation made herein. Every such claim shall state:

1. The name and postoffice of the claimant.
2. The location of the farm upon which the claim is based.
3. The total acreage of all cultivated crops produced in the year in which such claim is presented.
4. All other information deemed essential by the said Compensation Claim Board for the performance of the duties devolved upon them by this act.

Each allotment of compensation shall be evidenced by a written order, entered in a permanently bound book kept by the Board in the office of the Commissioner of Agriculture, and a certified copy of each allotment shall be given the claimant. If any claimant is dissatisfied with the action of the claim board on his claim, he shall have the right within six months after the decision of the claim board to make application to the district court of the county of which he is a resident or in which his cotton was destroyed or in which he was prevented from growing cotton and have the action of the claim board reviewed by such district court. If the State, acting through the Commissioner of Agriculture, is dissatisfied with any such decision of the claim board, it shall likewise have the right to resort to said court for such review.

PINK BOLLWORM COMMISSION.

SEC. 10. As soon as practicable after the passage of this act, the Governor of the State shall appoint a Pink Bollworm Commission for the State composed of five men who shall serve until relieved therefrom by the Governor whose duties are defined herein. One shall be appointed upon the recommendation of the Commissioner of Agriculture of Texas; one upon the recommendation of the Secretary of Agriculture of the United States; one upon the recommendation of the district judge of the county or counties under consideration; and two upon his own discretion; provided that the latter two citizens shall be actual cotton growers. Should any of the officials herein authorized to make recommendations for appointment fail or refuse so to do, or should any person so nominated refuse to serve or become incapacitated, for service, the Governor should make such appointment upon his own discretion. The Pink Bollworm Commission shall take the constitutional oath of office and shall have authority to administer oaths for the purpose of taking testimony. They shall organize by electing one of their number chairman and the Commissioner of Agriculture shall be ex-officio secretary. They shall receive a salary of five ($5) dollars per day and actual and necessary traveling expenses while actually engaged in the performance of their duties.

AUTHORITY TO ENTER FIELDS.

SEC. 11. For the purpose of complying with the requirements of this act, the Commissioner of Agriculture and his authorized agents shall have the power to enter into any field or fields of cotton or upon any premises in which cotton or its products may be stored or held, and may examine any products or container of cotton or thing or substance liable to be infested with the pink bollworm, and shall have power to enter upon any premises for the purpose of issuing permits and to examine all books and records of purchasers or handlers or common carriers of cotton and cotton products.

COMMISSIONER OF AGRICULTURE MAY EMPLOY AGENTS.

SEC. 12. The Commissioner of Agriculture shall make adequate investigation to determine the presence of the pink bollworm in the State and shall take prompt action to secure the establishment and maintenance of an effective quarantine of all infested areas that may be discovered within the State, pursuant to the provisions of this act. For the purpose of carrying out the provisions of this act, the Commissioner of Agriculture may employ inspectors, and such other help as he may deem necessary and may prescribe the duties of such inspectors and other help; provided that no person shall be appointed as an inspector who has not had at least two years actual experience as an entomologist, or two years training as an entomologist in the science department of some reputable college or university; and provided further that the inspectors shall be paid not exceeding one hundred and fifty ($150) dollars per month and their necessary expenses.

COOPERATION WITH UNITED STATES DEPARTMENT OF AGRICULTURE.

SEC. 13. It shall be the duty of the Commissioner of Agriculture to cooperate with the Secretary of Agriculture of the United States in any measure authorized and to be undertaken by authority of the Federal government in preventing the introduction or establishment of the pink bollworm in the State of Texas. In the event that the Congress of the United States should appropriate any moneys with which to assist the State of Texas in the payment of compensation to farmers for being deprived of the right to plant cotton, and should such appropriation by Congress provide for this money to be disbursed by the State of Texas, the Treasurer of the State is hereby authorized to receive such moneys from the United States Government, and the Commissioner of Agriculture is hereby authorized to disburse same in accordance with the laws of the State of Texas and the United States.

APPROPRIATIONS.

SEC. 14. For the purpose of carrying out the provisions of this act there is hereby appropriated out of any funds in the general revenue not otherwise appropriated, the sum of one hundred twenty-five thousand ($125,000) dollars, one hundred thousand ($100,000) dollars of which may be used in the payment of compensation and damages which may become due under the provisions of this act, and the remaining twenty-five thousand ($25,000) dollars of which may be used in the payment of expenses incurred in the administration of this act, which shall include salaries, expenses, printing, postage, telegraph, telephone, express, etc., needed in the enforcement of this act. All claims for damages and claims for compensation arising from the enforcement of the

provisions of this act shall be paid on certified statement by the chairman of the Compensation Claim Board, or upon certified copy of the final judgment of a court of competent jurisdiction, by warrants drawn by the Comptroller of the State Treasury, and all salaries and other expenses of whatsoever nature incurred in the administration of this act shall be paid in the usual way upon a certified statement of the Commissioner of Agriculture.

PENALTIES.

SEC. 15. Any person or persons who may transport any cotton or cotton products by any means from any territory in this State which has been quarantined and placed under restrictions by proclamation of the Governor of the State, in accordance with the authority conferred by the terms of this act, or any person or persons who shall violate any proclamation or any rule, regulation or other restriction authorized by this act, or bring into the State any contaminated material, or any person or persons who shall plant, cultivate, grow, allow to grow, gather, transport or market cotton in or from any territory in this State, that has been quarantined and declared a noncotton zone and placed under restrictions by any of the proclamations authorized by this act, or any person or persons who shall fail to comply with any of the said rules and regulations so promulgated for the control and direction of cotton growing and marketing in any restricted or regulated zone; or who shall violate any proclamation or restriction authorized by this act; or any ginner who shall fail or refuse to disinfect cotton seed as provided for in this act, or any person or persons who shall wilfully refuse or knowingly neglect to comply with any such proclamation, restriction or regulation promulgated and maintained for the protection of the cotton industry, shall be deemed guilty of a misdemeanor and, upon conviction, shall be fined in any sum not less than fifty ($50) dollars, and each transaction of each product so shipped or transported, and each act in violation of the restriction herein authorized governing the planting, growing, marketing and cleaning the fields, shall constitute a separate offense. The district court of the county in which any criminal case is filed under the provisions of this section may, upon the application of either the State or of the defendant and a showing that the applicant can not obtain fair trial in that county, order a change of venue to an adjoining county or district.

SEC. 16. All laws or parts of laws in conflict with this act are hereby repealed.

SEC. 17. All regulated zones and noncotton zones in effect for 1921 are hereby renewed and carried forward and shall be subject to the provisions of this act, and all procedure taken to establish such zone when this act becomes effective are hereby validated, and all unexpended portions of appropriations heretofore made for the control and eradication of the pink bollworm are hereby reappropriated and carried forward.

SEC. 18. The importance of this legislation to the cotton industry of Texas and to the public welfare creates an emergency and an imperative public necessity that the constitutional rule requiring bills to be read on three several days should be, and the same is hereby suspended, and that this act take effect and be in force from and after its passage, and it is so enacted.

LYNCH DAVIDSON,
President of the Senate.

CHAS. G. THOMAS,
Speaker of the House.

Approved: September 1, 1921.

PAT M. NEFF, *Governor.*

I hereby certify that Senate Bill No. 15 passed the Senate by two-thirds vote of: 25 ayes, 3 noes, August 9, 1921, and that the Senate concurred in House amendments August 16, 1921.

M. V. HOWERTON, *Secretary of the Senate.*

I hereby certify that Senate Bill No. 15 passed the House with amendments August 15, 1921.

C. L. PHINNEY, *Chief Clerk of the House.*

Received in the executive office this 16th day of August, A. D. 1921, at 8 o'clock and 0 minutes p. m.

A. B. WALTHAL, *Secretary to the Governor.*

Received in Department of State this 1st day of September A. D., 1921, at 3 o'clock and 20 minutes p. m.

S. L. STAPLES, *Secretary of State.*

JOINT RESOLUTION AUTHORIZING FEDERAL AID TO FARMERS IN NON-COTTON ZONES.

[Public Resolution—No. 12—67th Congress.]

[S. J. Res. 72.]

JOINT RESOLUTION For the relief of States in the cotton belt that have given aid to cotton farmers forced from the fields in established nonproduction zones through efforts to eradicate the pink bollworm.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That when any State shall have enacted legislation and taken measures, including the establishment and enforcement of noncotton zones, adequate, in the opinion of the Secretary of Agriculture, to eradicate the pink bollworm in any area thereof actually infested, or threatened, by such pest, the said Secretary, under regulations to be prescribed by him, is authorized, out of the appropriation of $554,840 for "Eradication of pink bollworm" made by the Agricultural Appropriation Act of March 3, 1921, to utilize not to exceed $200,000 in reimbursing such States for expenses incurred by them in compensating any farmer for his loss due to the enforced nonproduction of cotton within said zones: *Provided,* That such reimbursement of any State shall be based upon the actual and necessary loss suffered by the owner of said land; that such reimbursement shall not exceed one-third the amount actually paid by the State to any farmer, and, in no event, shall exceed $5 per acre; and that no reimbursement shall be made in respect of any farmer who has not complied in good faith with all quarantine and control regulations prescribed by said Secretary of Agriculture and such State relative to the pink bollworm.

Approved, August 9, 1921.

FEDERAL AID EXTENDED STATES PAYING FARMERS IN NONCOTTON ZONES.

(Press notice.)

WASHINGTON, D. C., *August 22, 1921.*

Under the terms of a joint resolution adopted by Congress and signed by President Harding, the United States Department of Agriculture will be able to contribute to the relief of States in the cotton belt that have given aid to farmers in noncotton zones established in the effort to eradicate the pink bollworm.

The resolution makes available for this purpose $200,000 of the $554,840 provided in the Agricultural Appropriation Act for the current fiscal year for pink bollworm eradication. When any State has taken adequate steps to eradicate the pink bollworm in any area actually infested or threatened, the Secretary may reimburse it for expenses incurred in compensating farmers for loss due to the enforced nonproduction of cotton. Reimbursement must be based upon the actual and necessary loss suffered by the owner of the land. It can not exceed one-third the amount actually paid by the State to any farmer, and must not exceed $5 per acre. No reimbursement will be made on account of any farmer who has not complied in good faith with all quarantine and control regulations prescribed by the Secretary of Agriculture and the State relative to the pink bollworm.

It is held by the department that prohibition of the growing of cotton works a hardship on such farmers as find cotton a much more profitable crop than any other, and compensation is deemed to be just in these cases the same as where live stock is killed in the process of stamping out a contagious disease. It is the opinion of department scientists who are familiar with the matter that the use of pink bollworm eradication appropriation for reimbursement purposes will result in saving money in the fight against this pest. It now costs approximately $10 an acre to clean infested cotton land of old cotton. In noncotton zones this cost is eliminated.

QUARANTINE ON ACCOUNT OF THE PINK BOLLWORM.

UNITED STATES DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
FEDERAL HORTICULTURAL BOARD.

NOTICE OF QUARANTINE NO. 52.

(Effective on and after September 10, 1921. Supersedes Notice of Quarantine No. 46, as amended.)

The fact has been determined by the Secretary of Agriculture, and notice is hereby given, that an injurious insect, the pink bollworm (*Pectinophora gossypiella* Saunders), new to and not heretofore widely prevalent or distributed within and throughout the United States, exists in the States of Texas, Louisiana, and New Mexico.

Now, therefore, I, H. C. Wallace, Secretary of Agriculture, under authority conferred by section 8 of the plant quarantine act of August 20, 1912 (37 Stat., 315), as amended by the act of Congress appproved March 4, 1917 (39 Stat., 1134, 1165), do hereby quarantine the States of Texas, Louisiana, and New Mexico, and by this Notice of Quarantine No. 52 do order that cotton, including all parts of the plant, seed cotton, cotton lint, linters, gin waste and all other forms of cotton lint, cotton seed, cottonseed hulls, cottonseed cake, and meal, bagging and other containers of the articles enumerated, and also railway cars, boats, and other vehicles which have been used in conveying cotton and cotton products grown in the States named or which are fouled with such products, hay and other farm products, farm household goods and farm equipment, shall not be moved or allowed to be moved interstate from the said quarantined States in manner or method or under conditions other than those prescribed in the rules and regulations hereinafter made and amendments thereto: *Provided*, That the restrictions of this quarantine and the rules and regulations supplemental thereto may be limited to the areas in a quarantined State now or hereafter designated by the Secretary of Agriculture as infested areas and regulated areas when said State shall have provided for and enforced such control measures with respect to such designated areas as in the judgment of the Secretary of Agriculture shall be deemed adequate to effect the control and prevent the spread of the pink bollworm, or until the Secretary of Agriculture shall have determined that dangerous or infested material is being carried out of such designated areas.[1]

Done in the District of Columbia this 19th day of August, 1921.

Witness my hand and the seal of the United States Department of Agriculture.

[SEAL.] HENRY C. WALLACE,
Secretary of Agriculture.

RULES AND REGULATIONS SUPPLEMENTAL TO NOTICE OF QUARANTINE NO. 52.

REGULATION 1. DEFINITIONS.—For the purposes of these regulations the following words, names, and terms shall be construed, respectively, to mean:

(*a*) Cotton and other articles: Cotton, including all parts of the plant, seed cotton, cotton lint, linters, gin waste and all other forms of cotton lint, cotton seed, cottonseed hulls, cottonseed cake and meal, bagging and other containers of the articles enumerated, and also railway cars, boats, and other vehicles which have been used in conveying cotton and cotton products grown in the infested districts or which are fouled with such products, hay and other farm products, farm household goods, and farm equipment.

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[1] See Appendix.

(*b*) Pink bollworm: The insect known as the pink bollworm of cotton (*Pectinophora gossypiella* Saunders).

(*c*) Quarantined area: Any State, or any portion thereof, quarantined by the Secretary of Agriculture upon determination by him that the pink bollworm exists therein.

(*d*) Infested area: Those portions of any quarantined area which are determined by the Secretary of Agriculture to be infested with the pink bollworm.

(*e*) Regulated area: Those portions of any quarantined area in which the growth of cotton is permitted under the restriction that the crop shall be under the full control of the State authorities in cooperation with the United States Department of Agriculture for the purpose of enforcing any safeguards that shall be determined to be necessary with respect to the disposition and movement of the crop.

(*f*) Inspector: An inspector of the United States Department of Agriculture.

REGULATION 2. COTTON AND OTHER ARTICLES SUBJECT TO RESTRICTION.—The restrictions on the movement of cotton and other articles covered in this Notice of Quarantine No. 52 and in the rules and regulations supplemental thereto shall apply to all products and articles enumerated in the notice of quarantine originating in or moving from the areas in the quarantined States now or hereafter designated by the Secretary of Agriculture as infested or regulated areas.

No restrictions are placed by this quarantine and the regulations supplemental thereto on the interstate movement of the articles enumerated therein from all points in the quarantined States outside of the areas now or hereafter designated by the Secretary of Agriculture as infested or regulated areas.

REGULATION 3. INFESTED AREAS.—The following districts in Texas, Louisiana, and New Mexico are designated as infested areas:

Texas.—All of the counties of Orange, Jefferson, Chambers, and Galveston, and the portions of Brazoria, Fort Bend, Harris, Liberty, Newton, Jasper, and Hardin Counties, included within a line extending from the mouth of Chocolate Bayou northward along the bayou to the bridge where the Elby Knappe Road crosses the bayou south of Alvin near the S. T. Angier survey; thence in a westerly direction to Sandy Point on the International & Great Northern Railway; thence west to the Brazos River; thence north along the Brazos River to the Gulf, Colorado & Santa Fe Railway bridge west of Arcola; thence in a northeasterly direction to the intersection of the Fort Bend, Brazoria, and Harris County lines south of Almeda; thence along Clear Creek to the Santa Fe crossing north of Pearland; thence northward along said railroad to the Sims Bayou; thence northeasterly along Sims Bayou to Buffalo Bayou; thence along Buffalo Bayou to the San Jacinto River; thence northward along the San Jacinto River to the Gulf Coast Railway; thence northeasterly along the Gulf Coast Railway to the Harris-Liberty County line; thence along the Liberty and Harris County line to Luce Bayou on the Ed. King survey; thence along Luce Bayou in a northeasterly direction to the northeast corner of the Thomas Garrett survey; thence in a northerly direction along the east side of the Hugh Means survey and the J. R. Fault survey to the southwest corner of the Manuel de los Santos Coy survey; thence east along the south line of the Santos Coy survey to the Hardin County line; thence southeast along the Hardin and Liberty County line, following that line to the east line of Liberty County; thence northeastward to the town of Kountze; thence northwestward along the Texas & New Orleans Railway to the south line of Tyler County; thence due east along the south line of Tyler County and continuing due east across Jasper and Newton Counties to the Sabine River; thence southward along the Sabine River to its mouth.

All of the counties of Presidio, Brewster, El Paso, Hudspeth, Pecos, Ward, and Reeves.

Louisiana.—All of the parish of Cameron.

Those portions of Jefferson Davis and Calcasieu Parishes described as follows: Beginning at the northwest corner of T. 9 S., R. 4 W., in Jefferson Davis Parish, running south along eastern boundary of said township to its southeastern corner; thence southward along the eastern boundary of T. 10 S., R. 4 W., to the point where this boundary crosses Bayou Chien; thence in a generally westward direction along Bayou Chien to its confluence with Bayou Lachassine; thence northward along Bayou Lachassine to the Southern boundary of section 20 in T. 10 S., R. 6 W.; thence westward along the southern boundaries of sections 19, 24, 23, 22, and 21 to the western line of Jefferson Davis Parish; thence westward in Calcasieu Parish along the southern boundaries of sections 20, 19, 24, 23, 22, and 21 to T. 10 S., R. 7 W.; thence southward along western boundary of T. 11 S., R. 7 W., to the southwestern corner of section 16 in said township; thence westward along southern boundaries of sections 17 and 18 in said township and along southern boundaries of sections 24, 23, 22, 21, 20, and 19 of T. 11 S., R. 8 W.; thence westward to the southwestern corner of section 24 in T. 11 S., R. 9 W.; thence north to northwestern corner of section 13 in T. 10 S., R. 9 W.; thence eastward to Bayou Contraband; thence along bayou in a northwesterly direction to Calcasieu River; thence northward along Calcasieu River and Lake Charles to the Southern Pacific Railway; thence eastward along Southern Pacific Railway to the western boundary of T. 9 S., R. 7 W.; thence northward along western boundary of said township to Calcasieu River; thence in a northeasterly direction along Calcasieu River to mouth of Bayou Arsand; thence along the course of Bayou Arsand to the eastern boundary of Calcasieu Parish; thence continuing in Jefferson Davis Parish along southern boundaries of sections 30, 29, 28, 27, 26, and 25 in T. 8 S., R. 6 W., to the eastern boundary of said township; thence south along the western boundary of T. 8 S., R. 5 W., to the southern boundary of said township; thence due east along southern boundaries of T. 8 S., R. 5 W., and T. 8 S., R. 4 W., to the point of beginning.

The Shreveport area, including those portions of Caddo and Bossier Parishes bounded by a line running from the Red River west along the north line of section 14, T. 18 N., R. 14 W., to the northwest corner of said section; thence south along the west lines of sections 14, 23, 26, and 35, T. 18 N., R. 14 W., to the southwest corner of section 35, T. 18 N., R. 14 W.; thence west along the north line of T. 17 N., R. 14 W., to the northwest corner of said township; thence south along the entire length of the west line of T. 17 N., R. 14 W.; thence east along the entire length of the south line of T. 17 N., R. 14 W., and continuing due east on the same straight line to the west bank of Bayou Pierre; thence following the west bank of Bayou Pierre in a northerly direction to the point where this bayou joins Red River east of Shreveport; thence across Red River to the point where the east line of section 33, T. 18 N., R. 13 W., touches Red River; thence north along the east lines of sections 33, 28, 21, and 16, T. 18 N., R. 13 W., to the northeast corner of section 16, T. 18 N., R. 13 W.; thence west along the south lines of sections 9, 8, and 7, T. 18 N., R. 13 W., and continuing due west along the same straight line to the east bank of Red River; thence across Red River to the point where the north line of section 14, T. 18 N., R. 14 W., touches the west bank of Red River, the point of beginning.

New Mexico.—All of the counties of Dona Ana and Eddy.

REGULATION 4. REGULATED AREAS.—The following districts in Texas, Louisiana, and New Mexico are designated as regulated areas:

Texas.—All of the counties of Maverick, Kinney, and Val Verde.

Louisiana.—All of the parishes of Jefferson Davis and Calcasieu not included in infested areas in Regulation 3.

All of those portions of the following townships about Shreveport not included in infested areas in Regulation 3: T. 17, R. 13; T. 18, R. 13; T. 18, R. 14; T. 17, R. 14; and in addition thereto, sections 1, 2, 3, 4, 5, and 6 of T. 16, R. 14; as well as sections 1, 12, 13, 24, 25, and 36 of T. 17, R. 15.

An area including a radius of 5 miles around the oil mills at each of the following points: Alexandria, Broussard, and Gretna, except that in the case of Gretna that area east of the Mississippi River is excluded.

An area including a radius of 10 miles around the oil mill at Eunice.

New Mexico.—All of the county of Chaves.

REGULATION 5. EXTENSION OR REDUCTION OF INFESTED AND REGULATED AREAS.—The infested areas and regulated areas designated in Regulations 3 and 4 may be extended or reduced as may be found advisable by the Secretary of Agriculture. Due notice of any extension or reduction and the areas affected thereby will be given in writing to the transportation companies doing business in or through the State in which these areas are located and by publication in newspapers selected by the Secretary of Agriculture within the States in which the areas affected are located.

REGULATION 6.—CONTROL OF COTTON AND OTHER ARTICLES.—The interstate movement of seed cotton and the stalk and other parts of the cotton plant is prohibited.

The interstate movement of cotton lint, linters, gin waste and all other forms of cotton lint, hulls, cake, meal, and bagging and other containers which have been used in connection with such articles, and also railway cars, boats, and other vehicles which have been used in conveying cotton and cotton products grown in the regulated or infested districts or which are fouled with such products, hay and other farm products, farm household goods and farm equipment, will be allowed only under permit issued by the Secretary of Agriculture and upon compliance with conditions to be prescribed in such permit.

The interstate movement of cotton seed grown in the infested or regulated areas will be allowed only under permit issued by the Secretary of Agriculture and upon compliance with the following conditions:

1. A permit must be issued before cotton seed will be permitted to pass from a quarantine district in one State into another State.

Permits will be issued for interstate shipments of cotton seed from quarantined territory only when the seed has been heated to a point sufficient to kill the pink bollworm in a machine which has been tested to the satisfaction and approval of an inspector of the Federal Horticultural Board.

3. No particular make of machinery is prescribed. Any machine which does the work to the satisfaction of the inspector of the Federal Horticultural Board will be approved.

4. All of the seed must go through the heating chamber. Every part of the mass must remain at least five minutes in a temperature of at least 200° F. There must be such an adequate installation of thermometers as will enable the inspectors of the Federal Horticultural Board to determine that these requirements are met.

5. Permits will be issued only for shipments to mills which have agreed to the following requirements:

(*a*) Seed must be unloaded directly into the hopper or into a conveyor leading directly to the hopper for immediate crushing.

(*b*) All seed scattered in the process of handling must be immediately collected and crushed along with the other seed or burned.

(*c*) The process of hulling must be accomplished by running the seed first through either a bar huller or a disk huller; immediately thereafter, without storage but as a continuous process, through a disk huller. This disk huller is to be kept in fine adjustment at all times, so that there is no possibility of any uncrushed seed making their way through it.

(*d*) Such construction, installation, or repair of chutes and conveyors must be made as, in the opinion of an inspector of the Federal Horticultural Board, will prevent the possibility of contamination of the hulls with the seed.

(*e*) Cars must be thoroughly cleaned of all seed immediately after unloading.

(*f*) All seed received in a condition unfit for crushing must be immediately burned.

(*g*) Mills shall make such reports from time to time as are required by the Federal Horticulaural Board or its accredited representatives and shall allow inspectors of the Board free access to all parts of mills at all times.

(*h*) Mills must execute a bond with approved sureties in the amount of $5,000 guaranteeing compliance with the foregoing regulations.

Regulation 7. Inspection and Certification.—Cotton and other articles the interstate movement of which is permitted under Regulation 6 shall not be moved or allowed to be moved interstate until such products have been inspected and certified by the United States Department of Agriculture.

Regulation 8. Marking and Certification.—Cotton and other articles the interstate movement of which is permitted under Regulation 6 shall be subject to such marking and labeling as may be required by the inspector of the United States Department of Agriculture. Copies of the permit required by Regulation 6 must be attached to the waybills, conductors' manifests, memoranda, or bills of lading covering such shipments. In the case of lint, linters, and bagging or other containers, the bales or other parcels of such materials shall be plainly marked with the name and address of the shipper and the name and address of the consignee. Containers of cottonseed hulls, cake, and meal will not be required to be marked, but copies of the permit must be attached to the waybills, conductors' manifests, memoranda, or bills of lading covering such shipments.

Regulation 9. Conditions under which cotton and other articles originating outside of the infested and regulated areas may be shipped from points within infested and regulated areas.—Cotton and other articles of which the interstate movement is restricted by these regulations and which originate outside of the infested and regulated areas quarantined on account of the pink bollworm of cotton may be shipped interstate from points within the infested and regulated areas to points outside of such areas under permit from the Secretary of Agriculture. Transportation companies shall not accept or move interstate from within the infested and regulated areas such articles originating outside of the infested and regulated areas unless each shipment is accompanied by a permit issued by the United States Department of Agriculture.

Regulation 10. Conditions governing inspection and issuance of certificates and permits.—Persons intending to move or allow to be moved cotton or other articles for which certificates of inspection or permits are required by these regulations will make application therefor as far as possible in advance of the probable date of shipment. Applications should show the nature and quantity of the articles which it is proposed to move, together with their exact location, and, if practicable, the contemplated date of shipment. All charges for storage, cartage, and labor incident to inspection, other

than the services of inspectors, shall be paid by the shipper. Applications for inspection and issuance of certificates and permits must contain the names and addresses of the consignors and consignees and should be made to the office of the Federal Horticultural Board, Carter Building, Houston, Tex., or to such other offices as may be later established, and of which due notice shall have been given.

REGULATION 11. CLEANING OF RAILWAY CARS, BOATS, AND OTHER VEHICLES AND MATERIALS REQUIRED BEFORE MOVING INTERSTATE.—Railway cars, boats, and other vehicles, hay and other farm products, farm household goods, and farm equipment, covered by these regulations, or any other articles which may hereafter be made subject thereto, and originating within the quarantined and regulated areas, shall not be moved or allowed to move interstate unless the same shall have been thoroughly cleaned or disinfected at the point of origin or shipment to the satisfaction of an inspector of the United States Department of Agriculture.

REGULATION 12. SHIPMENT BY THE UNITED STATES DEPARTMENT OF AGRICULTURE.—This quarantine shall not apply to the movement by the United States Department of Agriculture of cotton and other articles specified therein when intended for experimental or scientific purposes.

This notice of quarantine amends and supersedes Notice of Quarantine No. 46 as amended, promulgated July 21, 1920, and shall be effective on and after September 10, 1921.

Done in the District of Columbia this 19th day of August, 1921.

Witness my hand and the seal of the United States Department of Agriculture.

[SEAL] HENRY C. WALLACE,
Secretary of Agriculture.

APPENDIX.

STATE CONTROL OF COTTON AND OTHER ARTICLES IN COOPERATION WITH FEDERAL AUTHORITIES.

Internal control by the State, in cooperation with Federal authorities, of cotton and other articles set forth in the following paragraphs will be required under the proviso to Quarantine No. 52 as a condition of limiting, by the Secretary of Agriculture, the restrictions of the rules and regulations under that quarantine to the areas designated as infested or regulated. These conditions are subject to such modification by the Secretary of Agriculture from time to time as may be determined to be necessary.

The growing crop.—The growing crop shall be under the full control of State authorities in cooperation with the Federal authorities, such control to include authority to inspect the fields as often as may be deemed necessary and to require the prompt destruction of any cotton in fields which shall be determined as infested with the pink bollworm.

Cotton seed.—All cotton seed grown in the regulated areas shall be under the full control of the State authorities in cooperation wih the Federal authorities. This control shall provide for its prompt milling or its disinfection under supervision at gins by a process approved by the Federal Horticultural Board, in which case the use of the seed for planting or for feeding will be allowed.

Cottonseed hulls.—All cottonseed hulls shall be cut to such degree of fineness as to destroy all infestation by the pink bollworm at the mills, as a continuing part of the process of hulling and milling of the seed, in such manner and by such means as shall be required by the proper officials of the State concerned in cooperation with the Federal authorities.

Cotton lint, linters, gin waste, and all other forms of cotton lint.—All lint, linters, gin waste and all other forms of cotton lint produced in regulated areas shall be under the full control of the State authorities in cooperation with the Federal authorities. The interstate movement of these products will be allowed only under permit issued by the Secretary of Agriculture and upon compliance with the conditions to be prescribed in such permit.

Conveyors, household goods, farm products, etc.—Railway cars, boats, and other vehicles which have been used in conveying cotton and cotton products grown in the infested districts or which are fouled with such products, hay and other farm products, farm household goods, and farm equipment shall, as a condition of intrastate movement, be subject to such inspection, cleaning, and disinfection as shall be deemed necessary to prevent the spread by such means and agencies of the pink bollworm.

Cotton in noncotton zones.—All volunteer or other cotton growing in a noncotton zone shall be promptly destroyed.

PINK BOLLWORM QUARANTINE NOW INCLUDES NEW MEXICO.

(Press notice.)

WASHINGTON, D. C., *September 24, 1921.*

A widening of the Federal quarantine against the pink bollworm to include the State of New Mexico is announced by the Federal Horticultural Board of the United States Department of Agriculture. This action resulted from the finding of infestations of the cotton pest in this State, which made necessary a revision of the original quarantine covering Texas and Louisiana, where a stubborn fight to check the spread of the insect has been carried on for some time.

The new order now issued by the board defines certain areas known to be infested by the pink bollworm, and other districts in the several States quarantined, from which the movement of cotton and its products to other States will be subject to regulation by the Federal Government. Rigid regulations governing the interstate movement of cotton and other articles likely to carry the pest to other States are provided.

The interstate movement of seed cotton and the stalk and other parts of the cotton plant is prohibited. Cotton lint, linters, gin waste and all other forms of cotton lint, hulls, cake, meal, and bagging and other containers which have been used in connection with such articles, and also railway cars, boats, and other vehicles which have been used in conveying cotton and cotton products grown in the regulated or infested areas, or which are fouled with such products, hay and other farm products, farm household goods and farm equipment will be allowed to move in interstate commerce only under permit issued by the Secretary of Agriculture and upon compliance with conditions to be prescribed in the permit.

The interstate movement of cotton seed grown in these areas will be allowed only under permit issued by the Secretary of Agriculture and upon compliance with certain conditions.

Copies of the new order, known as Notice of Quarantine No. 52, may be had upon application to the United States Department of Agriculture, Washington, D. C.

AMENDMENT NO. 1 TO NOTICE OF QUARANTINE NO. 52 ON ACCOUNT OF THE PINK BOLLWORM.

UNITED STATES DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
FEDERAL HORTICULTURAL BOARD.

Under authority conferred by the Plant Quarantine Act of August 20, 1912 (37 Stat., 315), as amended by the act of Congress approved March 4, 1917 (39 Stat., 1134, 1165), it is ordered that regulation 3 under Notice of Quarantine No. 52, quarantining the States of Texas, Louisiana, and New Mexico on ac-

count of the pink bollworm, effective September 10, 1921, be, and the same is hereby, amended to read as follows:

REGULATION 3. INFESTED AREAS.—The following districts in Texas, Louisiana, and New Mexico are designated as infested areas:

Texas.—All of the counties of Orange, Jefferson, Chambers, and Galveston (except the island of Galveston therein), and the portions of Brazoria, Fort Bend, Harris, Liberty, Newton, Jasper, and Hardin Counties, included within a line extending from the mouth of Chocolate Bayou northward along the bayou to the bridge where the Elby Knappe Road crosses the bayou, south of Alvin near the S. T. Angier survey; thence in a westerly direction to Sandy Point on the International & Great Northern Railway; thence west to the Brazos River; thence north along the Brazos River to the Gulf, Colorado & Santa Fe Railway bridge west of Arcola; thence in a northeasterly direction to the intersection of the Fort Bend, Brazoria, and Harris County lines south of Almeda; thence along Clear Creek to the Santa Fe crossing north of Pearland; thence northward along said railroad to the Sims Bayou; thence northeasterly along Sims Bayou to Buffalo Bayou; thence along Buffalo Bayou to the San Jacinto River; thence northward along the San Jacinto River to the Gulf Coast Railway; thence northeasterly along the Gulf Coast Railway to the Harris-Liberty County line; thence along the Liberty and Harris County line to Luce Bayou on the Ed. King survey; thence along Luce Bayou in a northeasterly direction to the northeast corner of the Thomas Garrett survey; thence in a northerly direction along the east side of the Hugh Means survey and the J. R. Fault survey to the southwest corner of the Manuel de los Santos Coy survey; thence east along the south line of the Santos Coy survey to the Hardin County line; thence southeast along the Hardin and Liberty County line, following that line to the east line of Liberty County; thence northeastward to the town of Kountze; thence northwestward along the Texas & New Orleans Railway to the south line of Tyler County; thence due east along the south line of Tyler County and continuing due east across Jasper and Newton Counties to the Sabine River; thence southward along the Sabine River to its mouth.

All of the counties of Presidio, Brewster, El Paso, Hudspeth, Pecos, Ward, and Reeves.

Louisiana.—All of the parish of Cameron.

Those portions of Jefferson Davis and Calcasieu Parishes described as follows: Beginning at the northwest corner of T. 9 S., R. 4 W., in Jefferson Davis Parish, running south along eastern boundary of said township to its southeastern corner; thence southward along the eastern boundary of T. 10 S., R. 4 W., to the point where this boundary crosses Bayou Chien; thence in a generally westward direction along Bayou Chien to its confluence with Bayou Lachassine; thence northward along Bayou Lachassine to the southern boundary of section 20 in T. 10 S., R. 6 W.; thence westward along the southern boundaries of sections 19, 24, 23, 22, and 21 to the western line of Jefferson Davis Parish; thence westward in Calcasieu Parish along the southern boundaries of sections 20, 19, 24, 23, 22, and 21 to T. 10 S., R. 7 W.; thence southward along western boundary of T. 11 S., R. 7 W., to the southwestern corner of section 16 in said township; thence westward along southern boundaries of sections 17 and 18 in said township and along southern boundaries of sections 24, 23, 22, 21, 20, and 19 of T. 11 S., R. 8 W.; thence westward to the southwestern corner of section 24 in T. 11 S., R. 9 W.; thence north to northwestern corner of section 13 in T. 10 S., R 9 W.; thence eastward to Bayou Contraband; thence along bayou in a northwesterly direction to Calcasieu River; thence northward along Calcasieu River and Lake Charles to the Southern Pacific Railway; thence eastward along Southern Pacific Railway to the western boundary of T. 9 S., R. 7 W.; thence northward along western boundary of said township to Calcasieu River; thence in a northeasterly direction along Calcasieu River to mouth of Bayou Arsand; thence along the course of Bayou Arsand to the eastern boundary of Calcasieu Parish; thence continuing in Jefferson Davis Parish along southern boundaries of sections 30, 29, 28, 27, 26, and 25 in T. 8 S., R. 6 W., to the eastern boundary of said township; thence south along the western boundary of T. 8 S., R. 5 W., to the southern boundary of said township; thence due east along southern boundaries of T. 8 S., R. 5 W., and T. 8 S., R. 4 W., to the point of beginning.

The Shreveport area, including those portions of Caddo and Bossier Parishes bounded by a line running from the Red River west along the north line of section 14, T. 18 N., R. 14 W., to the northwest corner of said section; thence south along the west lines of sections 14, 23, 26, and 35, T. 18 N., R. 14 W., to the southwest corner of section 35, T. 18 N., R. 14 W.; thence west along the

north line of T. 17 N., R. 14 W., to the northwest corner of said township; thence south along the entire length of the west line of T. 17 N., R. 14 W.; thence east along the entire length of the south line of T. 17 N., R. 14 W., and continuing due east on the same straight line to the west bank of Bayou Pierre; thence following the west bank of Bayou Pierre in a northerly direction to the point where this bayou joins Red River east of Shreveport; thence across Red River to the point where the east line of section 33, T. 18 N., R. 13 W., touches Red River; thence north along the east lines of sections 33, 28, 21, and 16, T. 18 N., R. 13 W., to the northeast corner of section 16, T. 18 N., R. 13 W.; thence west along the south lines of sections 9, 8, and 7, T. 18 N., R. 13 W., and continuing due west along the same straight line to the east bank of Red River; thence across Red River to the point where the north line of section 14, T. 18 N., R. 14 W., touches the west bank of Red River, the point of beginning.

New Mexico.—All of the counties of Dona Ana and Eddy.

This amendment shall become effective on November 1, 1921.

Done in the District of Columbia this 24th day of October, 1921.

Witness my hand and the seal of the United States Department of Agriculture.

[SEAL.] HENRY C. WALLACE,
Secretary of Agriculture.

PINK BOLLWORM QUARANTINE REMOVED FROM ISLAND OF GALVESTON—AMENTMENT NO. 1 TO QUARANTINE NO. 52.

(Press notice.)

WASHINGTON, D. C., *November 7, 1921.*

An amendment to the pink bollworm quarantine notice, removing the island of Galveston from inclusion in the area designated as infested with the cotton pest, effective November 1, has been announced by the Federal Horticultural Board of the United States Department of Agriculture. In effect, this action allows Galveston to make interstate shipments of cotton from outside the quarantined area without the formality of a permit.

While no cotton is grown on the island, the port of Galveston is an important shipping point for cotton. Practically all the cotton entering Galveston is for foreign export, and for this reason there has been little or no objection to the inclusion of the town and island in the infested area, which includes Galveston County, Tex. It developed, however, that it might be advisable to ship out of Galveston cotton that has come from a part of the State not under quarantine restriction. It was thought desirable, therefore, to provide means for the movement interstate of cotton from outside the quarantined area without restrictions, as is now the case with Houston.

All quarantined cotton entering Galveston will be covered by permits authorizing exportation only. This cotton will be accounted for from the time it is ginned until it is marked and tagged and placed on shipboard. Prior to the amendment of this regulation, unquarantined cotton entering Galveston could be shipped interstate only under permit from the Federal Horticultural Board. The amendment remedies this situation without in any way weakening the protective measures now being enforced relative to cotton originating in infested areas.

[Text of the amendment to pink bollworm quarantine followed.]

IMPORTANT CONFERENCE ON THE PINK BOLLWORM TO BE HELD AT DALLAS, TEX., DECEMBER 2, 1921.

UNITED STATES DEPARTMENT OF AGRICULTURE,
FEDERAL HORTICULTURAL BOARD,
Washington, D. C., November 12, 1921.

Very recently five fields in the vicinity of Ennis, Ellis County, Tex., have been found infested by the pink bollworm. This county is the largest producer

of cotton in Texas. Another important consideration is the fact that in Ellis County are located a number of the largest cotton seed farms in the South.

The Ellis County infestation apparently originated in seed shipped from Carlsbad, N. Mex., of the crop of 1920, prior to the determination of the incipient infestation at that point January 6, 1921. All of the seed shipped from the Carlsbad crop of 1921 has been adequately disinfected by heating. Twenty-seven carloads of seed produced during the years 1918–1920 were shipped to Ennis. A large number of additional carloads during this period went to a number of widely separated points in Texas. A small number of shipments were also made to points in Oklahoma. At many of these points the Carlsbad seed was more or less subdivided and in many cases used for planting purposes. All of these points have been under field inspection throughout the season and the Ellis infestation is the only one so far discovered.

Following the infestation determined in 1918 in the Pecos Valley of Texas, separated by about 90 miles of semi-desert from Carlsbad, the Carlsbad project has been under intensive inspection to determine any possible infestation at that point. For example, in 1918 111 man-days (in other words, full days of cotton-field inspection) were given this district. In 1919, 56 man-days were devoted to scouting at Carlsbad. In 1920 scouting was continued for 48 days before the first infestation was found in standing field cotton January 6, 1921. Subsequent to this finding, 216 additional days were devoted to thorough field inspection throughout the Carlsbad project. This inspection developed only two infested fields out of 94 inspected, and a total of 16 pink bollworms were found.

This occurrence of the pink bollworm in Ellis County undoubtedly is by far the most important development which has occurred in relation to the finding of the pink bollworm in the United States. It demands early and most serious consideration by the authorities in Texas as well as by the authorities of all other States which produce cotton. For this reason the board has decided to hold a conference in Dallas on December 2. It will be called to order at 10 o'clock in the morning in the assembly room of the Texas Chamber of Commerce. It is urgently requested that you attend this conference.

In the meantime steps have been taken to secure, by cooperation on the part of the State of Texas and the Cotton Seed Breeders' Association of that State and others interested, adequate control of the movement of seed and cotton from Ellis County, pending the determination of the conference.

Very respectfully,

C. L. MARLATT, *Chairman of Board.*

PINK BOLLWORM DISCOVERED IN ELLIS COUNTY, TEX.

(Press notice.)

WASHINGTON, D. C., *November 15, 1921.*

An important conference on the pink bollworm situation in Texas, occasioned by the recent discovery of new infestations in Ellis County, one of the largest cotton-producing counties in the State, has been called by the Federal Horticultural Board of the United States Department of Agriculture, to be held at Dallas, Tex., December 2, at 10 a. m., in the assembly room of the Texas Chamber of Commerce.

Notices of the conference have been sent by the board to State entomologists, commissioners of agriculture, and officials of Cotton Seed Crushers' Associations and the American Cotton Association urgently requesting their attendance.

The occurrence of the pink bollworm in Ellis County is looked upon as by far the most important development in the spread of the pest since its introduction

into the United States. According to Charles L. Marlatt, chairman of the board, the new situation demands early and most serious consideration by the authorities in Texas as well as by the authorities of all other States that produce cotton. In the meantime steps have been taken to secure, by cooperation on the part of the State of Texas and the Cotton Seed Breeders' Association of that State and others interested, adequate control of the movement of seed and cotton from Ellis County, pending the determination of the conference. [Text of the notice sent out by the board followed.—Pp. 124–125.]

SUMMARY OF THE PINK BOLLWORM SITUATION.

UNITED STATES DEPARTMENT OF AGRICULTURE,
FEDERAL HORTICULTURAL BOARD,
Washington, D. C., November 26, 1921.

The following summary of the existing pink bollworm situation has been prepared for the information of the persons attending the conference called by the Department of Agriculture for December 2, at Dallas, Tex.:

Naturally, in considering future operations against the pink bollworm, the principal question to be determined is whether there is a reasonable possibility of eradicating it in the States in which it is now known to occur and of keeping the cotton crop of the United States free from it in the future. In order to give proper consideration to this question, it is necessary to set out briefly the present status of the insect in these States, namely, Texas, Louisiana, and New Mexico.

Present status in Texas.—Prior to the discovery of the pest in Ellis County this fall, there were five areas or districts of infestation known in Texas, namely, the Hearne, Trinity Bay, Pecos Valley, Great Bend, and El Paso districts. The Hearne and Trinity Bay districts were the original centers of infestation in the State and the others are of later origin. The history of these five older districts in Texas is as follows:

The Hearne district.—The Hearne infestation resulted from the movement of Mexican seed for milling to that point prior to the establishment of the Federal quarantine in 1916. The infestation was limited to a few small fields and these and the surrounding district were maintained as a noncotton zone for three years, and this district is now believed to be entirely free from the pest.

The Trinity Bay district.—The Trinity Bay district covers a considerable area surrounding this Bay but over most of which, owing to unfavorable climate and topography, relatively little cotton is grown. The infestation of this district is believed to have originated with the great storm of 1915, which carried away some Mexican cotton from the wharves at Galveston and scattered the lint heavily around the shores of the Bay.

This district was cleared of all old cotton in the fall and winter of 1917–18 and again in 1919–20. It was maintained with substantial completeness as a noncotton zone throughout 1918. It was replanted more or less sparsely to cotton in 1919 and the insect reappeared in much reduced numbers over the original zone. It was again replanted in part to cotton in 1920, but owing to a poor crop season much of this cotton failed to survive. The actual findings of the pink bollworm in connection with the crop of 1920 show a reduction of perhaps 50 per cent in area and much more than that in actual abundance of the insect from the status of 1917.

In 1921, the central area of this district, including practically all the infestation determined in connection with the crop of 1920, was maintained as a noncotton zone, and, similarly, four other single points of infestation outside of this general central area were also made noncotton zones. Every field of cotton in

this district was repeatedly and thoroughly investigated during the season of 1921 and up to this time but a single infestation by the pink bollworm has been determined, namely, near Moss Bluff in southern Liberty County, just exterior to one of the small points maintained as a noncotton zone outside of the general noncotton zone area.

The Pecos Valley district.—The Pecos Valley district received its infestation from seed cotton grown on the Mexican side of the Great Bend of the Rio Grande and smuggled across and hauled to Barstow in the Pecos Valley for ginning. This infestation was detected in the fall of 1918 and was limited to a few fields and to a few plants only in such fields. In view of the isolation of this district from other cotton cultures and the thorough control which could be maintained with respect to it under the growth of cotton by irrigation, the continuation of the growth of cotton was permitted during the years 1919 and 1920. In 1919, intensive and repeated field examinations resulted in the finding of but a single infested plant and a single insect. In connection with the crop of 1920, a few infested fields were determined, involving also some new centers of cotton production in Pecos County. Only a few infested plants and a few insects were, however, found. These new infested Pecos areas were given a thorough cleaning in the winter of 1920–21. The continued recurrence of the insect in this general district indicates clearly enough the impossibility of effecting extermination except by the maintenance of a noncotton zone for two years or more.

The Great Bend district.—The Great Bend district involves as possibilities for cotton culture a few very limited valleys at the foot of the mountains, and cotton planting in this long strip of river border is of recent origin and has never much exceeded about 500 acres. The infestation here came from similar plantings on the Mexican side; in other words, from the same source as carried the insect to the Pecos district. This district was maintained as a noncotton zone for the crop seasons of 1919 and 1920. In connection with the crop of 1921 grown in this district the insect has reappeared, as was fully to have been expected on account of the ample possibilities of reinfestation from the Mexican side.

The El Paso district.—The El Paso Valley as a cotton district had its beginning in very limited plantings in 1919, followed by extensive plantings in 1920. This district comprises the narrow, irrigable strip along the river extending southeastward 60 or 70 miles and northwest into New Mexico. The insect was not found in 1919 but was quite generally present in the fields of 1920. On account of its proximity to possible cotton culture in Mexico and its situation relative to Juarez, the terminus of two important railway lines which are continually bringing to that point cars more or less fouled with cotton seed infested with this pest, together with the poorly controlled movement of Mexican laborers across the border, this general river strip is almost certain to be reinfested every year under any system of clean-up or control which involves the continuation of the growth of cotton. This necessitates a continuing noncotton zone for the general district if the pink bollworm is to be kept out of Texas, or until such cooperation with Mexico is obtained as will lead to the cleaning up of the cultivated land on the Mexican side of the river and the freeing of the railway traffic—cars and freight—centering at Juarez from infestation at some interior point in Mexico. The necessity for the thorough control of the pest at this point is emphasized by the fact that El Paso is an important traffic center and heavy infestation at this point would almost certainly be a means of distributing the pest into Arizona and California westward, and throughout Texas and other cotton States eastward.

In 1921 the cotton production in the El Paso district was approximately half that of the previous year. Up to the present time (November 22) one infestation has been found, but others will certainly be found as the result of further scouting.

The new centers of infestation in Ellis and Grayson Counties.—As indicated in the call for the conference, there has been determined this fall infestation in five fields in the vicinity of Ennis, Ellis County, Tex. Subsequent to the issuance of this call, another new point of infestation has been determined in a field near Marilee, Grayson County, Tex. It is believed that these outbreaks originated from seed of the crop of 1920 shipped from Carlsbad, New Mex., prior to the determination of incipient infestation at that point January 6, 1921. This new development has a very serious outlook not only from the fact of the knowledge of wide shipment of similar seed from Carlsbad of the crop of 1920, but also from the consideration that this new infestation carries the insect into the heart of the Black Land cotton district of Texas. If, however, the infestation should prove to be limited to a few fields, the situation will not be very different from that originally determined at Hearne, Tex., which has been most successfully coped with. Probably by the time of the conference, December 2, much more definite information relative to the amount and significance of these two new infestations will be available.

To summarize, of the five older areas of infestation, the Hearne area has been apparently freed from the pest and is a demonstration, therefore, of what can be accomplished where adequate control is maintained for a period of years. The great reduction of infestation in the large Trinity Bay district is very satisfactory in view of the failure to secure complete cooperation and enforcement of noncotton zones. The control, however, has been largely aided by the natural noncotton zone resulting from the unfavorable crop year 1920. The reappearance of the pest in the Pecos Valley, Great Bend, Trinity Bay, and the El Paso region, was fully expected; in other words, it is realized that there is little or no possibility of exterminating a pest of this nature except by the elimination for a considerable period of the growth of its food plant.

Present status of the pink bollworm in Louisiana.—The occurrence of the insect in three parishes in southwestern Louisiana, adjoining the Trinity Bay district of Texas, was determined in the winter of 1919–20. The extension into Louisiana was evidently due to some movements of cotton seed for planting from the adjacent Texas district.

The prompt and efficient work of Louisiana, in cooperation with the Federal authorities, has produced a very favorable outlook for the extermination of the pest in that State. The three parishes determined as infested in 1919 were maintained as noncotton zones in 1920, with thoroughgoing cooperation on the part of the State and planters, and have been continued as such for 1921 as to all the areas actually known to have been infested in 1919. As no pink bollworms have been found in the districts in the two years, the areas about the five towns which were under suspicion because of a shipment of seed to oil mills have been under regulation. The only additional infestation as a result of such movement of seed was the infestation determined late in 1920 in the vicinity of Shreveport. Thoroughgoing clean-up operations were given to this district in the following winter of 1920–21 and this new invaded area was also maintained by the State as a noncotton zone for 1921, and will be continued as such for 1922.

The entire success of the noncotton zone as to the three parishes in southwestern Louisiana, namely, the elimination of cotton and the complete nonrecurrence of any pink bollworm in any volunteer or any other chance cotton

in the district during the two years has led the board to agree to the substitution of a regulated zone for a noncotton zone for that district for the crop year 1922.

So far as now known there is no pink bollworm in the State of Louisiana and control methods which are being continued are, therefore, merely precautionary.

The status in New Mexico.—The extension of the El Paso district north of El Paso into New Mexico and the invasion at Carlsbad in the Pecos Valley are related one to the El Paso district and the other to the Pecos Valley district of Texas. In both of these areas cotton is grown under irrigation and the insect could undoubtedly be easily exterminated by the prohibition for two or three years of the growth of cottoon.

State and Federal authority for pink bollworm control now ample.—The effort joined in by the department to get adequate legislation from the State of Texas to keep up the program of extermination failed with respect to the regular session of the legislature, which convened early in 1921. As a result of this failure and the consequent impossibility of carrying on effective control work in Texas, a pink bollworm conference was called at Washington for May 16, 1921, for the purpose of considering how best to prevent the spread of this pest from Texas to other cotton-producing States. This conference was attended by quarantine officers, representatives of the important agricultural organizations, and many individuals from practically all of the States interested in cotton culture. In its report this conference voiced the conviction that there is still a possibility of eradicating the pink bollworm in the United States through the establishment and maintenance of noncotton zones. It further recommended that funds for compensating farmers in noncotton zones be supplied under adequate safeguards jointly by the State and Federal Governments.

On the promise of the Texas representatives at the conference that a strong and united effort would be made to secure adequate pink bollworm legislation for that State, including the compensation feature, at a special session of the legislature which was called for July, and following the recommendation of the conference, this department requested authority from Congress to use not to exceed $200,000 of the existing pink bollworm appropriation to participate with the States in compensation of farmers in noncotton zones. This recommendation was favorably acted upon by Congress in the joint resolution of August 9, 1921. This resolution provides that the Federal payments shall be limited to the actual and necessary loss incurred by the farmer, shall in no case exceed $5 per acre and shall not be more than one-third of the amount paid by any State, and that no reimbursement shall be made in respect of any farmer who has not in good faith complied with all State and Federal regulations.

The special session of the Texas Legislature, which duly convened in July, again took up the subject of pink bollworm legislation and passed a law in which many of the defects of previous pink bollworm legislation are corrected. This law provides for cooperation with the United States Department of Agriculture and for compensation to planters in noncottoon zones on the basis of actual loss incurred.

The Federal quarantine action on account of the pink bollworm has been extended to cover the new infestations by this pest in western Texas, in New Mexico, and at Shreveport, La.

The outlook.—The future menace of the pink bollwork to the cotton crop of this country had been fully indicated by the records of this pest in Egypt, Brazil, Hawaii, and Mexico. A question as to the importance of this pest

to the cotton crop of Texas and the South, which naturally arose in the minds of the planters on account of lack of adequate acquaintance with it, has been largely removed as a result of the report of a commission organized by the Texas Chamber of Commerce, in November, 1920, to investigate and report directly to the governor on the pink bollworm situation in the Laguna district of Mexico. This Commission, made up of representatives of a number of State agricultural and cotton associations, after minute field examinations in the Laguna, submitted a report to the governor, indicating a loss of at least 50 per cent of the crop of 1920 of that district due to the pink bollworm.

Up to this time the effort of this department, in cooperation with the States concerned, has been to eradicate the insect. The bearing of the new findings in Texas on this program is the important subject for discussion at the conference. If the conditions of infestation at these new points as they shall be determined by the time of the conference, December 2, still lead to the belief which has hitherto been held by the experts, Federal and State, that extermination is possible, such extermination must necessarily involve the adoption and enforcement without interruption for a period of years of the policy of noncotton zones for the invaded areas. Any attempt to control the pest in connection with the continuation of the growth of cotton in areas actually infested will be followed by the inevitable increase of the pest in such areas and its ultimate spread throughout the South.

FINDINGS OF PINK BOLLWORM CONFERENCE, DALLAS, TEX., DECEMBER 2, 1921—REPORT OF COMMITTEE AT LARGE.

(1) On account of its isolation from the main cotton belt and its close proximity to the Mexican border, we believe that the western area of pink bollworm infestation including western Texas and New Mexico, may well be considered as an isolated infestation where, for the present the methods of control now in effect, should be continued. The following conclusions are, therefore, restricted in their application primarily to the eastern infested area:

(2) The Louisiana infestation discovered in 1919, and the east Texas areas, including the Hearne district and Trinity Bay districts, where the problem has been handled in accordance with methods approved and enforced by the Federal Horticultural Board in cooperation with the Louisiana and Texas State Departments of Agriculture, have shown conclusively that the complete extermination of the pink bollworm is possible by the thorough application of these methods. The work so successfully carried on in those areas will be largely lost unless the effort for complete eradication is continued.

(3) In view of the successful extermination work hitherto accomplished and also of the hearty cooperation now assured, we believe that complete extermination is possible and that every resource should be made available as needed to accomplish that result. We indorse the policy of complete extermination. This must necessarily include the maintenance of noncotton and regulated zones and the continuance of existing restrictions upon movements from such zones.

(4) We recommend cotton seed sterilization by heating in machinery and by methods as approved by, and certified to, in accordance with rules and regulations established by the Federal Horticultural Board an as additional safeguard, which should be applied immediately, particularly to all planting seed in all States where infestation is known, whether such seed is destined for intrastate or interstate movement, and such sterilization should be extended as rapidly as may be possible to include all cotton seed at the time of ginning.

(5) We believe that cotton lint grown outside of regulated zones in any infested State may, when properly baled, be allowed unrestricted interstate movement with safety.

(Signed)

Alabama—W. E. Hinds, State entomologist.

Arkansas—G. G. Becker, chief inspector, Arkansas State Plant Board.

Louisiana—W. E. Anderson, entomologist, department of agriculture and immigration.

Paul Perkins, member Louisiana Pink Bollworm Commission.

Clarence Ellerbe, member Louisiana Pink Bollworm Commission.

J. M. Bowen, representing New Orleans Cotton Exchange.

Mississippi—H. H. Kimball, chief inspector, State plant board.

S. Albrecht, Mississippi Cotton Seed Crushers' Association.

Texas—W. B. Bizzell, president, State Agricultural and Mechanical College.

J. Underwood, president, Texas Cotton Seed Crushers' Association.

Lynn P. Tally, representing Texas Bankers' Association.

D. E. Lyday, representing Texas Farmers' Educational and Cooperative Union.

E. P. Humbert, representing Texas Cotton Seed Breeders' Association.

R. E. McDonald, chief entomologist, State department of agriculture.

W. D. Farris, cotton grower, Ellis County, also representing Texas Farm Bureau Federation.

G. W. Garrow, representing Texas Cotton Association.

J. Z. George, representing Texas Chamber of Commerce.

L. O. Bailey, cotton grower, Marilee (Gunter), Grayson County, Tex.

Tennessee—G. M. Bentley, State entomologist and plant pathologist.

Oklahoma—C. E. Sanborn, State entomologist.

W. J. Lackey, seed analyst, State board of agriculture.

The Federal Horticultural Board—represented by C. L. Marlatt, chairman, W. D. Hunter, Karl F. Kellerman, and George B. Sudworth.

PINK BOLLWORM CONFERENCE DECIDES ON A FIGHT TO THE FINISH.

(Press notice.)

WASHINGTON, D. C., *December 14, 1921.*

The conference called by the Federal Horticultural Board of the United States Department of Agriculture on account of the recent discovery of the pink bollworm in Ellis and Grayson Counties, Tex., and held at Dallas, December 2 and 3, brought together the important interests related to cotton from Texas, and official and other representatives from other cotton States. The conference developed an absolute unanimity of opinion that every measure should be taken for the extermination of the pink bollworm pest in Texas and other Southern States. Unqualified assurances of support in all measures necessary were given by the spokesman of each of the Texas delegations, and by representative growers from the newly infested counties.

As an outcome of the conference a series of recommendations were drawn up by a large committee representing all the farm and cotton associations of Texas, the State Agricultural and Mechanical College, bankers' association, etc., and also official and other representatives of other cotton States. These recom-

mendations were approved by the Federal Horticultural Board for the department and will be the basis for the control activities to be undertaken in the immediate future. In the meantime, promptly following the determination of infestation in these counties, a quarantine was put in effect by the State of Texas controlling not only the infested portions of these counties but also a surrounding safety zone. A very strong feeling developed that if the situation remained substantially as now determined there was still a reasonable chance of exterminating this pest, and that, therefore, the efforts—State and Federal—looking to extermination should be vigorously continued.

The committee reported that on account of its separation from the main cotton belt and its close proximity to the Mexican border, the western area of pink bollworm infestation, including western Texas and New Mexico, may well be considered as an isolated infestation where, for the present the methods of control now in effect, should be continued.

The following conclusions are, therefore, restricted in their application primarily to the eastern infested area.

The Louisiana infestation discovered in 1919, and the east Texas areas, including the Hearne and Trinity Bay districts, have shown conclusively that the complete extermination of the pink bollworm is possible by the thorough application of methods approved and enforced by the Federal Horticultural Board in cooperation with the Louisiana and Texas State Departments of Agriculture. The work so successfully carried on in those areas will be largely lost unless the effort for complete eradication is continued.

Complete extermination is believed possible and every resource should be made available as needed, to accomplish that result. The policy of complete extermination was indorsed. This necessarily includes the maintenance of noncotton and regulated zones and the continuance of existing restrictions upon movements from such zones.

Cottonseed sterilization by heating in machinery and by other approved methods was recommended as an additional safeguard, which should be applied immediately, particularly to all planting seed in all States where infestation is known, and such sterilization should be extended as rapidly as may be possible to include all cottonseed at the time of ginning.

Cotton lint grown outside of regulated zones in any infested state may, when properly baled, be allowed unrestricted interstate movement, with safety, in the opinion of the committee.

STATE QUARANTINE ACTION RELATIVE TO NEW INFESTATIONS OF 1921 IN ELLIS, GRAYSON, AND LIBERTY COUNTIES, TEX.

[Under proclamations of the Governor of Texas, preliminary or emergency quarantine action was taken relative to the infestation in Ellis County near Ennis November 15, 1921, and with respect to the infestation in Grayson County, near Marilee station, November 19, 1921. These quarantines were replaced by the definite quarantine action taken January 11, 1922, with respect to these localities and also the new point of infestation determined in Liberty County, reproduced below.]

PROCLAMATION BY THE GOVERNOR OF THE STATE OF TEXAS.

To all whom these presents shall come:

WHEREAS, under section 8, Chapter 41, General Laws of the first called session of the thirty-seventh legislature, the honorable commissioner of agriculture of the State of Texas has caused to be made a thorough examination of certain cotton fields within the State and has found infestation of the pink bollworm, *Pectinophora gossypiella*, to exist near Moss Bluff in Liberty County, about

Ennis in Ellis County, and near Gunter on or about the Collin-Grayson County line.

WHEREAS, the pink bollworm commission appointed as provided for in section 10 of the above-mentioned act has held duly advertised public hearings at Liberty in Liberty County, at Ennis in Ellis County, and at Gunter in Grayson County, and,

WHEREAS, the said pink bollworm commission has recommended that certain areas be created noncotton zones as provided for in section 8 of the above-mentioned act, field notes of which, as set forth in said report, are as follows:

All that certain territory included within a circle whose radius is one mile and whose center is the gin at Marilee station, on or near the Collin-Grayson County line, and being on the St. Louis & San Francisco Railroad, such territory being a part of Collin and a part of Grayson Counties of the State of Texas; and all that certain territory being a part of Liberty County of the State of Texas and included within the following described boundaries, to wit:

Beginning on the Liberty-Wallisville road at a point where a bridge crosses Redmond Creek, north and near Volcour La Cour's residence; thence with said Redmond Creek in a westerly direction to Self Bayou; thence with Self Bayou to the Trinity River; thence with the Trinity River in a southerly direction in its meandering course to the Liberty and Chambers County line; thence with the Liberty and Chambers County line easterly to the Liberty-Wallisville road; thence with said road north to the point of beginning.

And that part of Ellis County included within the following-described boundaries, to wit:

Beginning where the Ennis and Telico public road crosses the city limits of Ennis immediately behind the Dr. Loggin's residence; thence in a northwesterly direction and continuing with said city limits all the way around to where said city limits at a point about where Ennis-Bardwell public highway intersects Madison Street, said Madison Street being on the extreme south of city limits; following said Madison Street and city limits to a point where said line and street crosses Cumming's Creek; thence down Cumming's Creek with its meanderings to the south corner of the J. D. Shegog tract on the bank of said creek; thence with the south line of the J. D. Shegog tract to where it intersects Ennis-Oak Grove public road; thence south down said public road to the northwest corner of the J. A. Sweatman tract; thence in an easterly direction with Sweatman's north line to the Ennis-Rice middle road; thence north with Ennis-Rice middle road crossing Interurban to a point where it intersects Ennis-Corsicana highway; thence in a southeasterly direction with the Ennis-Corsicana highway to a point where the Walker's Creek road leaves the Ennis-Corsicana highway; thence east with the Walker's Creek public road to where the upper and old Porter's Bluff road intersects; thence with said Porter's Bluff road in a northerly direction to where said road intersects Ennis-Creechville public road; thence east with the said Creechville road to a ravine on the old Soap place; thence in a northwesterly direction with this ravine to where it empties into Cottonwood Creek; thence up Cottonwood Creek to the northeast corner of the Edgar Kendall tract; thence with Kendall's north line in a northwesterly direction to the intersection of the Ennis and Telico public road; thence in a southerly direction with the Ennis-Telico public road to the city limits and the place of beginning, immediately behind the Dr. Loggin's residence.

And that part of Ellis County included within the following described boundaries, to wit:

Beginning at the southwest corner of William M. McKinney survey about 3 miles southwest of Ennis where the Loli schoolhouse and Allen schoolhouse public road crosses the McClain Branch; thence southwest with said public road, crossing the Ennis-Corsicana highway at John Champion's residence where the tile silo stands; thence on in a southwesterly direction with said schoolhouse road to a point where said road intersects the old Allen Lake and Ennis public road; thence northwest with said Allen Lake public road to the corner of the old R. C. Collin's farm; thence in an easterly direction with the north line of the Collin's and McClain land passing the McClain meadow; thence continue in the same direction on line between McClain and John Sonka to a point where division line crosses McClain Branch; thence with McClain Branch in a southeasterly direction to the place of beginning.

Now, therefore, I, Pat M. Neff, governor of Texas, by virtue of authority vested in me by the laws of the State of Texas, do hereby declare and proclaim the territory defined above noncotton zones, in which zones I hereby declare the

growing of cotton a public menace, and hereafter it shall be unlawful to plant, cultivate, or grow cotton in the above described zones until this proclamation shall be withdrawn or modified by lawful authority, and,

WHEREAS, the said pink bollworm commission has recommended that certain areas be created regulated zones as provided for in section 8 of the above-mentioned act, field notes of which, set forth in said report, are as follows:

That part of Collin and Denton Counties included within the following described boundaries, to wit:

Beginning at the Grayson, Denton, and Collin County line, which is the northwest corner of Collin County; thence south along the Collin and Denton County line to the southeast corner of the Light ranch; thence west with the south boundary of said ranch following the public road to the northeast corner of the Isaac Walters survey; thence south to a steel bridge on Mustang Creek on a public road, known as the Celina and Mustang road; thence south and west following the east bank of Mustang Creek to where it empties into Little Elm Creek; thence south on Little Elm Creek to a steel bridge on the Public road known as the Aubrey and Parvin road; thence east on said road to the Mustang and Elm Bridge public road; thence south to the Parvin and Navo public road; thence east following said road to Parvin and Collin County line; thence north and east following the Parvin and Rheas mill public road to the northeast corner of the John Greenwood farm; thence south following the public road to the northwest corner of the William Butler survey; thence east following public road to the Dallas and Preston road; thence north following said road to the Parvin and Rheas mill road; thence east to the southwest corner of the Rhea farm; thence north and east to the Celina-McKinney pike; thence to twin bridges on the public road; thence east to a point on the Charles Gilmer survey public road; thence north to the southwest corner of the Caleb Hart survey 3978; thence east to point on the west boundary line of Grizzell Kenedy survey; thence north and east to southwest corner of Andrew Culwell survey; thence due north, following west boundary lines of the following surveys: Andrew S. Culwell, W. M. Culwell, William Warden, James Sarago, Joe Mitchum, James Heffelfinger to Grayson County south boundary line; thence west along said Grayson and Collin County line to place of beginning.

And that part of Grayson County included within the following described boundaries, to wit:

Beginning at a point on the Grayson and Collin County line, where East Fork Creek crosses the county line from Grayson County to Collin County; thence up East Fork Creek to a point where Bradford Creek runs into East Fork Creek; thence up Bradford Creek to a point on the north line of B. R. Brook's 103-acre tract; thence west through the Mary Miller survey to the southeast corner of J. S. Thom survey, abstract No. 1189; thence north to the Collinsville and Dorchester pike road; thence west with said pike road to west line of said J. S. Thom survey; thence north with west line of said J. S. Thom survey to the northwest corner of said survey; thence west on a straight line to the northeast corner of the J. J. Ward survey, abstract No. 304; thence west with north line of J. J. Ward survey to the northwest corner of said survey; thence south on the west line of the said Ward survey to Range Creek; thence down Range Creek to the north line of G. R. Bone survey, abstract No. 118; thence west with north line of said Bone survey to the northwest corner of said survey; thence south with the west line of said Bone survey to the southwest corner of said survey, continuing this line south to Range Creek; thence down Range Creek to the west line of the H. Eakes survey, abstract No. 386; thence south with the west line of said H. Eakes survey to the southwest corner of same; thence south to Liberty Hill schoolhouse; thence continuing south with the Gunter and Tioga Pike road to a point where same road turns east, and continuing south through the S. A. & M. G. R. R. survey, abstract No. 1143, to the northwest corner of R. E. Hayes survey, abstract No. 550, to Buck Creek; thence south making a south line from the H. Eakes survey, abstract No. 386, to Buck Creek on the R. E. Hayes survey; thence down Buck Creek to a point near the northwest corner of J. D. Thomas survey, abstract No. 1213; thence south on the west line of J. D. Thomas survey to the southwest corner of said survey, and continuing south to the south line of Grayson County; thence east along south boundary line of Grayson County to place of beginning.

That part of Ellis County included within the following described boundaries, to wit:

Beginning at a point on Waxahachie Creek where Ellis and Navarro County line crosses said creek; thence up Waxahachie Creek with its meanderings to a

wooden bridge on the public road leading from the Ennis and Waxahachie highway to Howard, known as the old Blackman bridge, which is also the corner between R. W. Getzendaner and T. N. Templeton; thence in a northerly direction with said Getzendaner east line and west Templeton line crossing the Ennis public highway continuing in the same direction 600 yards; thence in a westerly direction 350 yards to a public road runnning from the Waxahachie-Ennis highway to Bethel school house and to a connection of the Ennis-Waxahachie-Ferris road which is the southwest corner of the Thomas Norvell survey; thence in a northeasterly direction with the public road and the south line of the Thomas Norvell and R. Mayfield survey to the southwest corner of the C. Cullum; thence northwest with the west line of C. Cullum to the southwest corner of the M. W. Dameron, thence east with the south line of the Dameron survey to a point where it intersects the west line of the T. B. May survey, which is also the southeast corner of the Dameron and a public road running from Garrett to Boyce; thence up the east line of the Dameron survey with the public road to where it intersects a public road running parallel to the Houston & Texas Central Railroad; thence east with the Houston & Texas Central Railroad to a public road leading from the northeast corner of the T. B. Mays near the railroad north to the Waxahachie-Boyce-Ennis highway; thence east with the Waxahachie-Ennis public highway to the point near the southeast corner of the Eady Jordan and the southwest corner of the D. E. Hays where a public road leaves the Ennis-Waxahachie highway; thence with the said public road in a northerly direction between the east line of the Jordan and the west line of the Hays to a point where said road crosses Boyce or Cottonwood Creek; thence with the meanderings down said creek to the Houston & Texas Central Railroad; thence in a southeast direction with base line of R. de la Pena 11 league grant to a point in said line that is the southwest corner of the northwest quarter of the northwest quarter of section 16 of said R. de la Pena grant; thence in a northeasterly direction with the south line of the northwest quarter of the northwest quarter No. 2 and the northeast quarter of the southwest quarter and the northeast quarter of the northeast quarter No. 1 of section 16 of said grant; thence with south line of the northwest quarter of the northwest quarter No. 2 of section 15 of said grant to the Palmer and Garrett public road; thence southeast direction with said public road to a point to the southwest corner of southwest quarter of the southwest quarter No. 2 of section 15 of said grant; thence with south line of the southwest quarter and the southeast quarter of the southwest quarter No. 3 of section 15 of said grant; thence in said direction to a point in the east line of the southwest quarter No. 3 of section 15, being the southeast quarter of the southeast quarter of the southwest quarter No. 3 of section 15 of said grant; thence down the east line of the southwest quarter No. 3 of section 15 to the Ennis-Bristol upper road; thence northeast with said road to the northeast corner of the northeast quarter No. 1 section 10 of said grant; thence southeast with east line of the northeast quarter No. 1 of said grant, section 10. to a public road; thence in a westerly direction with said road to where a public road intersects, being on the south line of the northwest quarter No. 2 of said grant, section 10, and the north line of the southwest quarter No. 3 of said grant, section 10; thence in a southeast direction with said road to the Texas Midland Railroad; thence south along Texas Midland Railroad to a point in Village Creek where the Texas Midland Railroad crosses; thence down Village Creek with its meanderings in a general easterly direction to where it empties into Trinity River; thence down Trinity River to the Navarro County line; thence with the Navarro County line in a southeasterly direction where it crosses Waxahachie Creek to place of beginning.

Now, therefore, I, Pat M. Neff, governor of Texas, by virtue of authority vested in me by the laws of the State of Texas, do hereby declare and proclaim all the above-described territory (except such portions as are above proclaimed noncotton zones) regulated zones as provided for by law, in which the growing of cotton shall be permissible, if, and when carried on in conformity to the regulations prescribed therefor by the commissioner of agriculture of this State, such regulated zone to continue in full force and effect until withdrawn or modified by lawful authority.

In testimony whereof, I have hereunto signed my name and caused the seal of the State to be hereon impressed at the city of Austin this 11th day of January, A. D. 1922.

[SEAL] PAT M. NEFF, *Governor of Texas.*

STERILIZATION OF PLANTING SEED URGED BY TEXAS COTTONSEED BREEDERS.

On the call of R. E. McDonald, entomologist of the State department of agriculture of Texas, 37 Texas cottonseed breeders met in convention at Austin, Tex., November 22, 1921, and passed the following resolution urging the sterilization of all planting seed by heat to destroy any possibility of risk from pink bollworm. The text of this resolution follows:

During the past few years a large amount of cottonseed has been shipped from a district in New Mexico later found to be infested with the pink bollworm. This seed has been widely distributed not only in Texas but Oklahoma and Arkansas as well. The pink bollworm is known to be distributed through shipment of seed. The sterilization of planting seed by means of heat is known to destroy the pink bollworm without injuring the germination of the seed. Therefore, be it

Resolved, That the cottonseed breeders and dealers represented at this meeting wish to go on record as indorsing the plan of sterilizing by heat outlined by Dr. W. D. Hunter of the Federal Horticultural Board and Mr. R. E. McDonald, chief entomologist of the State department of agriculture, and pledge their cooperation. Be it further

Resolved, That we will henceforth sell only such seed for planting purposes as has been sterilized and passed upon and certified by the proper authorities of the Federal and State Governments. Be it further

Resolved, That we ask the cooperation of the Federal Horticultural Board, the State department of agriculture and Agriculture and Mechanical College of Texas and all other suitable organizations to assist in such an educational campaign that will cause farmers to realize the importance of planting only sterilized cottonseed. Be it further

Resolved, That we wish to impress upon the people of the State that as yet the pink bollworm infestation in Texas is in its incipiency and the damage to date is practically nothing. Proper methods have been employed by those in authority to safeguard the interests of the State and this offer on the part of the cottonseed breeders and dealers to sterilize their planting seed stocks is an effort on their part to cooperate with the authorities to safeguard the cotton industry.

AUTHORIZED MODIFICATION OF QUARANTINED DISTRICTS IN LOUISIANA.

[On request of the Pink Bollworm Commission of Louisiana, the board, under date of October 18, 1921, consented to the conversion of Cameron Parish from a noncotton zone into a regulated zone and later—December 9, 1921—extended the same action to the noncotton zones in Jefferson Davis and Calcasieu Parishes and released from regulation the zones hitherto maintained surrounding the towns of Gretna, Broussard, Eunice, and Alexandria. The official orders issued by the State authorities in relation to this action are reproduced below, and also the order continuing the noncotton and regulated zones surrounding Shreveport, La. Supplemental rules issued by the State authorities in relation to the regulated zones established in Cameron, Calcasieu, and Jefferson Davis Parishes are also reproduced.]

THE PINK BOLLWORM COMMISSION OF LOUISIANA, BATON ROUGE—PROCLAMATION.

WHEREAS, after maintaining a noncotton zone for more than two years in Cameron Parish, and certain areas of Calcasieu and Jefferson Davis Parishes where pink bollworm (*Pectinophora gossypiella* Saunders) had established itself, and

WHEREAS, it is the unanimous opinion of the Louisiana Pink Bollworm Commission that the pink bollworm has been eradicated within the above prescribed areas.

Therefore, with the permission of the Federal Horticultural Board, the above-prescribed areas are hereby discontinued as a noncotton zone and shall be retained as a regulated zone, subject to all rules and regulations pertaining to the handling of cotton, cotton seed and cottonseed products within a regulated zone.

The above ruling is made in accordance with act No. 36 of the general assembly of 1910, and shall have the full force and effect of law on and after January 17, 1922.

(Signed) W. E. ANDERSON,
Entomologist.

Approved:
HARRY D. WILSON,
Commissioner of Agriculture.

THE PINK BOLLWORM COMMISSION OF LOUISIANA, BATON ROUGE—PROCLAMATION.

WHEREAS, after maintaining a regulated zone around Gretna, Broussard, Eunice, Alexandria and in that area of Calcasieu and Jefferson Davis Parishes not described as a noncotton zone, to determine whether or not the pink bollworm (*Pectinophora gossypiella* Saunders) introduced at these points, as a result of seed shipment from areas known to be infested with the pink bollworm, and

WHEREAS, it has been established that apparently no infestation of the pink bollworm resulted from such shipments.

Therefore, with the permission of the Federal Horticultural Board, all rules and regulations pertaining to the handling, shipment or movement of cotton, cotton seed or cottonseed products within that area around Gretna, Broussard, Eunice, Alexandria and that area of Jefferson Davis and Calcasieu Parishes described as a regulated zone on account of the pink bollworm, is hereby repealed.

The above ruling is made in accordance with act No. 36 of the general assembly of 1910, and shall have the full force and effect of law on and after January 17, 1922.

(Signed) W. E. ANDERSON,
Entomologist.

Approved:
HARRY D. WILSON,
Commissioner of Agriculture.

THE PINK BOLLWORM COMMISSION OF LOUSIANA, BATON ROUGE—PROCLAMATION.

WHEREAS the finding of the pink bollworm (*Pectinophora gossypiella* Saunders) at different points in the immediate vicinity of Shreveport, in the early part of 1920, necessitated the establishment of a noncotton zone surrounded by an area known as the regulated zone in order to eradicate the infestation that had become established by the use of the noncotton zone and to prevent further dissemination by the use of a regulated zone.

It has been deemed advisable by the Louisiana Pink Bollworm Commission, after consulting with the Federal Horticultural Board, to maintain the same noncotton zone and regulated zone around Shreveport for the year 1922. A noncotton and regulated zone shall be governed by all the rules and regulations pertaining thereto.

The above ruling is made in accordance with act No. 36 of the general assembly of 1910, and shall have the full force and effect of law on and after January 17, 1922.

(Signed) W. E. ANDERSON,
Entomologist.

Approved:
HARRY D. WILSON,
Commissioner of Agriculture.

SUPPLEMENTAL RULES GOVERNING THE REGULATED ZONES IN SOUTHWESTERN LOUISIANA.

[These rules are additional to the rules and regulations hitherto issued governing regulated zones in Louisiana.]

RULE 1. Permits to plant cotton must be secured from a representative of the Pink Bollworm Commission.

RULE 2. Permits to plant cotton shall be issued only after the farmer has executed an agreement, which shall be furnished on application.

RULE 3. No cotton seed shall be planted within the above-described area that has not the approval of the Pink Bollworm Commission.

RULE 4. Permits to sell cotton seed shall be issued to merchant or dealer only after they have executed an affidavit showing the source of their cotton seed and satisfying the Pink Bollworm Commission as to its freedom from pests.

RULE 5. Railroad companies and other common carriers, or any private transportation agencies, are hereby prohibited from moving cotton, cotton seed, or cottonseed products from points from without to points within the parishes of Cameron, Calcasieu, and Jefferson Davis, provided this ruling shall not apply to shipments accompanied by permit, issued by the Pink Bollworm Commission.

(Signed) W. E. ANDERSON,
Entomologist.

Approved:
HARRY D. WILSON,
Chairman Pink Bollworm Commission.

QUARANTINE ACTION BY THE STATE OF NEW MEXICO.

QUARANTINE ORDER NO. 3.

In order to prevent the introduction and dissemination of the cotton boll weevil and the pink bollworm into and within the State of New Mexico, by virtue of authority vested in me (Chapter 170, Session Laws, 1919), I hereby order:

A. That the introduction into the State of New Mexico of cotton lint, linters, waste, sweepings, and samples of cotton seed, seed cotton, cottonseed hulls, cotton ginning, and milling machinery, cotton bagging, used cotton picker's sacks and all other things and materials which have been used in connection with the growing, harvesting, baling, or manufacturing of cotton lint, or cotton seed from any other State or Territory of the United States except Arizona or California, or any foreign country, except as herein provided, is hereby prohibited.

B. That the importation of corn in the shuck or Spanish moss from any State in which the cotton boll weevil exists or may hereafter exist, is hereby prohibited.

C. That the transportation of cotton seed or seed cotton from any county in the State of New Mexico, where the cotton boll weevil or pink bollworm may have been found into any other county in the State of New Mexico, is hereafter prohibited, except under special order.

D. That all persons, firms, or corporations in the State of New Mexico are prohibited from having in their possession, transporting, selling, or giving away any seed cotton or cotton seed or other articles introduced into the State or transported within the State in violation of this order.

E. That the board of regents of the Agricultural College is hereby designated as the board for the enforcement of the provisions of this order. (Chapter 77, Session Laws, 1919.)

MERRITT C. MECHEM, *Governor.*

MARCH 12, 1921.

COMMISSION APPOINTING COTTON BOLL WEEVIL AND PINK BOLLWORM OF COTTON INSPECTOR.

STATE OF NEW MEXICO,
County of Dona Ana, ss:

Know all men by these presents:

That the undersigned board of regents of the Agricultural College of New Mexico designated to enforce the provisions of a certain order of the governor of the State of New Mexico bearing date March 12, 1921, and entitled "Quarantine Order No. 3 (Cotton boll weevil and pink bollworm)," does hereby appoint Sidney D. Smith as inspector of and for and to represent the undersigned in all matters pertaining to the enforcement of said order in any and all counties in the State of New Mexico.

For said inspector the undersigned bespeaks the consideration of all interested parties and most respectfully asks the cooperation of all in order that the full intent and purpose of said order No. 3 may be carried out and the welfare of the interests sought to be protected thereby may be conserved.

This commission shall expire May 25, 1922, unless sooner revoked.

In testimony whereof the said board of regents of the Agricultural College of New Mexico has caused its name to be subscribed hereto and its seal affixed this 25th day of May, A. D. 1921, at State College, New Mexico.

Signed by the board of regents of the Agricultural College of New Mexico.

[SEAL.] C. L. HILL, *President.*

REGULATIONS GOVERNING THE GROWING AND MARKETING OF COTTON AND COTTON PRODUCTS IN REGULATED ZONES IN NEW MEXICO PROMULGATED BY THE BOARD OF REGENTS SUPPLEMENTARY AND AMENDATORY TO ALL REGULATIONS HERETOFORE PROMULGATED UPON THE SUBJECT.

STATE OF NEW MEXICO,
County of Dona Ana, ss:

To all whom these presents shall come:

In pursuance of authority invested in the board of regents of the Agricultural College of the State of New Mexico by the governor of the State of New Mexico for the enforcement of quarantine order No. 3 to prevent the introduction and dissemination of the pink bollworm of cotton (*Pectinophora gossypiella* Saunders) into and within the State of New Mexico these regulations have been promulgated governing the growing and marketing of cotton and cottonseed products in regulated zones in the State of New Mexico.

1. All cotton produced in regulated zones shall be ginned within the zones or if no gin is available in such zones then at such gins as may be designated and under such specific authority as the board of regents of the New Mexico Agricultural College may issue.

2. All seed cotton, lint, cotton seed, hulls, linters or gin or mill waste produced outside of a regulated zone which may be carried within the boundaries of a regulated or noncotton zone for any purpose shall be governed by the provisions of this act and shall be transported and marketed only in accordance with specific authority issued by the board of regents.

3. No lint cotton, linters, motes or gin waste shall be shipped or offered for shipment except after specific authority therefor has been issued by the board of regents and may be shipped only for export through the ports of Houston, Galveston, and Texas City and such other ports as may be designated by the board of regents.

4. All cotton seed produced in regulated zones shall be transported to oil mills designated in the permit issued by the authority of the board of regents and there crushed under the supervision of the board of regents or their authorized agents or in lieu thereof such seed shall be disinfected under the supervision of the board of regents or their authorized agents and then it shall not be unlawful to hold such seed within such regulated zone for planting or feeding purposes. Such disinfection consists essentially in heating the seed in any approved apparatus for a period of not less than five minutes under a temperature of not less than 200° F. *Provided, however*, That no cotton seed except in the form of seed cotton as provided for in regulation No. 1 shall be transported through any noninfested area in the State unless they have been disinfected as described herein.

5. All individuals taking seed home from the gin for planting purposes shall be held strictly responsible for the return of the same seed to the sterilizer for heating before planting.

6. That ginners at all times shall be ready to show exactly how much seed has been removed from their gins for planting purposes, the weight of the seed, and the name of the individual removing such seed.

7. That all individuals, firms, or corporations having planting seed for sale at any time shall be required to give a certificate that said seed has been heated to the required temperature to kill the larva of the pink bollworm of cotton or that such seed was raised outside of the State of New Mexico.

8. That individuals renting land shall be held strictly responsible that tenants plant only seed which has been heated to a temperature required to kill the larva of the pink bollworm of cotton.

9. Quarantine order No. 52 issued by the Secretary of Agriculture of the United States which provides for the interstate movement of cotton and its products originating in a regulated or infested area is hereby recognized and made a part of these regulations and cotton and cotton products originating from such regulated or infested areas outside of New Mexico shall be subject to the same provision in this State as such cotton and cotton products originating within regulated or infested areas within this State.

10. All plant quarantine inspectors of the United States Department of Agriculture are hereby granted authority to issue permits in accordance with these regulations for the shipment of cotton and cotton products originating within regulated and infested areas within this State and outside of the State for interstate shipment.

11. All persons selling lint cotton originating within a regulated area shall give notice to the buyer that such cotton is from quarantined territory and that it shall be exported.

12. All persons handling seed cotton, cotton, cotton seed, linters, motes, and other cotton products originating in the regulated area shall keep and furnish to the Department of Agriculture complete records concerning all sales or transfers thereof and all dealers, compress companies, and other persons shall so handle said products that the identity of same shall not be lost.

13. All freight cars after hauling seed cotton or cotton seed from regulated zones shall be cleaned and fumigated under the supervision of the board of regents or their authorized agents, such fumigations to be done immediately after unloading.

For the board of regents of the State College of New Mexico.

SIDNEY D. SMITH,
Plant Quarantine Inspector.

FARM BUREAU OFFICES,
Las Cruces, N. Mex.

THE EUROPEAN CORN BORER.

NOTICE OF PUBLIC HEARING TO DETERMINE WHETHER IT IS NECESSARY TO EXTEND THE QUARANTINE ON ACCOUNT OF THE EUROPEAN CORN BORER.

WASHINGTON, D. C., *September 23, 1921.*

The Secretary of Agriculture has information that the European corn borer (*Pyrausta nubilalis* Hubn.), a dangerous insect not heretofore widely prevalent or distributed within and throughout the United States, and on account of which Notice of Quarantine No. 43, which became effective March 29, 1920, quarantining the States of Massachusetts, New Hampshire, New York, and Pennsylvania, was issued, is now known to occur also in Maine and Ohio.

The European corn borer attacks corn and broom corn (including all parts of the stalk), and breeds in and may be transported by Sudan grass, celery, green beans in the pod, beets with tops, spinach, rhubarb, oat and rye straw as such or when used as packing, cut flowers or entire plants of chrysanthemum, aster, cosmos, zinnia, and hollyhock; also cut flowers or entire plants of gladiolus and dahlia, except the bulbs thereof without stems, and many other herbaceous plants.

It seems advisable, therefore, at this time to consider the establishment of a quarantine extending from Lake Michigan southward along the western border of Indiana to the Ohio River and thence eastward along the Ohio and Potomac Rivers or some other line across the Northeastern States, in accordance with the Plant Quarantine Act of August 20, 1912 (37 Stat., 315), as amended by the act of Congress approved March 4, 1917 (39 Stat., 1134, 1165), and of restricting or prohibiting the movement from these States or from any infested districts determined therein of corn and broom corn (including all parts of the stalk), Sudan grass, celery, green beans in the pod, beets with tops, spinach, rhubarb, oat and rye straw as such or when used as packing, cut flowers or entire plants of chrysanthemum, aster, cosmos, zinnia, and hollyhock; also cut flowers or

entire plants of gladiolus and dahlia, except the bulbs thereof without stems, and other herbaceous plants.

Notice is therefore hereby given that a public hearing will be held at the Department of Agriculture, Washington, D. C., room 11, Federal Horticultural Board, at 10 o'clock a. m., October 11, 1921, in order that any person interested in the proposed extension of the quarantine may appear and be heard either in person or by attorney.

EXTENSION OF CORN-BORER QUARANTINE TO BE CONSIDERED AT HEARING.

(Press notice.)

WASHINGTON, D. C., *September 26, 1921.*

A formal hearing to consider further steps necessary to prevent the spread of the European corn borer, which now threatens to invade the corn belt, will be held here October 11 by the Federal Horticultural Board of the United States Department of Agriculture. Federal quarantines against the pest now exist in the States of New Hampshire, Massachusetts, New York, and Pennsylvania. Reports of field investigations already indicate a very rapid spread of the borer during the present season, with new infestations in northwestern Pennsylvania and in northern Ohio, and the survey is still incomplete.

The insect is now so widely dispersed that it is necessary to consider the adoption of regional quarantines to be discussed at the hearing or, as an alternative plan, the complete abandonment of all quarantine action. It is an open question whether the protection of noninfested areas that can be secured through quarantine action from now on, will justify the expense of enforcement and the interference with commerce.

The hearing will take up this whole question, which may result in a reshaping of the board's policy in combating the spread of the pest. It will cover the application of any possible quarantine to corn and broom corn, including all parts of the stalk; Sudan grass, celery, green beans in the pod, beets with tops, spinach, rhubarb, oat and rye straw as such or when used as packing, cut flowers or entire plants of chrysanthemum, aster, cosmos, zinnia, and hollyhock; also cut flowers or entire plants of gladiolus and dahlia, except the bulbs without stems, and other herbaceous plants likely to carry the pest to new regions.

Persons interested in the proposed steps to be taken by the board may appear at the hearing and be heard either in person or by attorney.

CONTINUED FIGHT AGAINST EUROPEAN CORN BORER FAVORED AT HEARING.

(Press notice.)

WASHINGTON, D. C., *October 12, 1921.*

Continuance of the Government's fight against the European corn borer along the present lines was unanimously favored by representatives of important agricultural associations and State commissioners of agriculture and entomologists at the hearing held by the Federal Horticultural Board, United States Department of Agriculture, yesterday. Decided opposition was expressed to the proposal to abandon the quarantine of infested areas and wage the campaign on a regional basis.

After the conclusion of the hearing a resolution was adopted by the State representatives attending the hearing authorizing Commissioner of Agriculture Gilbert, of Massachusetts, to appoint a committee of five members representing the infested areas to draw up recommendations and present them to Secretary of Agriculture Wallace. It was also voted as being the sense of the delegates

that the Federal Government should appropriate $275,000 for conducting the work against the borer in the various States affected. Assurances were given by delegates from most of the States that Government money spent in their States would be matched by an equal amount of State funds for the work.

The board indicated that it was in substantial agreement on the plan to continue the quarantine control of the European corn borer along the present lines, the quarantine to be extended to include the new areas of infestation; and that it would recommend such action to Secretary Wallace together with the recommendation that Congress be asked for funds adequate to administer such quarantine. The experts of the Bureau of Entomology indicated that such quarantine control of all known areas of infestation could probably be adequately taken care of on an appropriation of $275,000, the same amount that was provided for the current fiscal year.

The hearing yesterday was called by the board as a result of new infestations of the pest recently found along the southern shore of Lake Erie and extending westward to within 60 miles of the Indiana border. With the pest so menacingly near the country's corn belt, the board was forced by lack of funds to consider the abandonment of its present method of quarantining infested areas and resort to a regional system. Under this method the movement of possible carriers of the pest would be permitted within the region but not to places outside of it. This, however, met with opposition from all factions present at the hearing yesterday.

Among the organizations represented at the hearing were the American Farm Bureau Federation, the State Grange of Connecticut, the Grain Dealers' Association, the National Canners' Association, the Boston Market Gardeners' Association, and the Northeastern Seedsmen's Association. Commissioners of agriculture of Massachusetts, Connecticut, and Maine were also present, and in addition official and other representatives from the States of Connecticut, Indiana, Maine, Maryland, Massachusetts, Michigan, Mississippi, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, and Wisconsin. The States of Illinois, Missouri, and Rhode Island were represented by letter.

QUARANTINE ON ACCOUNT OF EUROPEAN CORN BORER.

NOTICE OF QUARANTINE NO. 43 (REVISED).

[Effective on and after November 15, 1921. Amends and supersedes Quarantine No. 43.]

The fact has been determined by the Secretary of Agriculture, and notice is hereby given, that an injurious insect, the European corn borer (*Pyrausta nubilalis* Hubn.) new to and not heretofore widely prevalent or distributed within and throughout the United States, exists in the States of Massachusetts, New Hampshire, New York, Pennsylvania, Ohio and Michigan.

Now, therefore, I, Henry C. Wallace, Secretary of Agriculture, under authority conferred by section 8 of the Plant Quarantine Act of August 20, 1912 (37 Stat., 315), as amended by the act of Congress approved March 4, 1917 (39 Stat., 1134, 1165), do hereby quarantine the States of Massachusetts, New Hampshire, New York, Pennsylvania, Ohio and Michigan, and by this Notice of Quarantine No. 43 (revised) do order that the following articles shall not be moved or allowed to be moved interstate from any areas in said quarantined States designated, in the regulations supplemental hereto, as the areas infested with the corn borer, in manner or method or under conditions other than those prescribed in the rules and regulations hereinafter made and amendments thereto:

(1) Corn and broom corn (including all parts of the stalk), all sorghums, Sudan grass, celery, green beans in the pod, beets with tops, spinach, rhubarb,

oat and rye straw as such or when used as packing, cut flowers or entire plants of chrysanthemum, aster, cosmos, zinnia, hollyhock, and cut flowers or entire plants of gladiolus and dahlia, except the bulbs thereof, without stems, from infested areas in Massachusetts and New Hampshire.

(2) Corn and broom corn (including all parts of the stalk), all sorghums, and Sudan grass from infested areas in New York, Pennsylvania, Ohio, and Michigan.

Done in the District of Columbia this 29th day of October, 1921.

Witness my hand and the seal of the United States Department of Agriculture.

[SEAL.] HENRY C. WALLACE,
Secretary of Agriculture.

RULES AND REGULATIONS SUPPLEMENTAL TO NOTICE OF QUARANTINE NO. 43 (REVISED).

REGULATION 1. DEFINITIONS.—For the purpose of these regulations the following words, names, and terms shall be construed, respectively, to mean:

(*a*) Corn borer: The insect known as the European corn borer (*Pyrausta nubilalis* Hubn.).

(*b*) Quarantined area: Any State quarantined by the Secretary of Agriculture upon determination by him that the corn borer exists therein.

(*c*) Infested area: Those portions of any quarantined State designated by the Secretary of Agriculture as infested with the corn borer.

(*d*) Inspector: An inspector of the United States Department of Agriculture.

REGULATION 2. PLANTS AND PLANT PRODUCTS SUBJECT TO RESTRICTION.—The restrictions on the movement of plants and plant products covered in this Notice of Quarantine No. 43 (revised) and in the rules and regulations supplemental thereto shall apply to all products enumerated in the notice of quarantine originating in or moving from the areas in the quarantined States now or hereafter designated by the Secretary of Agriculture as infested areas.

No restrictions are placed by this quarantine and the regulations supplemental thereto on the interstate movement of the articles enumerated therein from all points in the quarantined States outside of the areas now or hereafter designated by the Secretary of Agriculture as infested areas.

No restrictions are placed by this quarantine and the regulations supplemental thereto on the interstate movement of the articles enumerated in this notice of quarantine when they shall have been manufactured or processed in such manner as to eliminate risk of carriage of the corn borer, nor of clean shelled corn and clean seed of broom corn.

REGULATION 3. INFESTED AREAS.—The fact has been determined by the Secretary of Agriculture that the corn borer exists in the areas designated below in the States of Massachusetts, New Hampshire, New York, Pennsylvania, Ohio, and Michigan, and such cities and towns (or townships) in each State are designated as infested areas for the purpose of these regulations:

Massachusetts.—Barnstable, Bourne, Brewster, Chatham, Dennis, Eastham, Falmouth, Harwich, Orleans, Provincetown, Sandwich, Truro, Wellfleet, and Yarmouth, in *Barnstable County;* Acushnet, Easton, Fairhaven, New Bedford, Raynham and Taunton, in *Bristol County;* Amesbury, Andover, Beverly, Boxford, Danvers, Essex, Georgetown, Gloucester, Groveland, Hamilton, Haverhill, Ipswich, Lawrence, Lynn, Lynnfield, Manchester, Marblehead, Merrimac, Methuen, Middleton, Nahant, Newbury, Newburyport, North Andover, Peabody, Rockport, Rowley, Salem, Salisbury, Saugus, Swampscott, Topsfield, Wenham, and West Newbury, in *Essex County;* Arlington, Bedford, Belmont, Billerica,

Burlington, Cambridge, Carlisle, Chelmsford, Concord, Dracut, Everett, Framingham, Lexington, Lincoln, Lowell, Malden, Maynard, Medford, Melrose, Natick, Newton, North Reading, Reading, Sherborn, Somerville, Stoneham, Sudbury, Tewksbury, Tyngsboro, Wakefield, Waltham, Watertown, Wayland, Westford, Weston, Wilmington, Winchester, and Woburn, in *Middlesex County;* Avon, Braintree, Brookline, Canton, Cohasset, Dedham, Dover, Holbrook, Medfield, Millis, Milton, Needham, Norwood, Quincy, Randolph, Sharon, Stoughton, Wellesley, Westwood, and Weymouth, in *Norfolk County;* Abington, Bridgewater, Brockton, Carver, Duxbury, East Bridgewater, Halifax, Hanover, Hanson, Hingham, Hull, Kingston, Lakeville, Marion, Marshfield, Mattapoisett, Middleboro, Norwell, Pembroke, Plymouth, Plympton, Rochester, Rockland, Scituate, Wareham, West Bridgewater, and Whitman, in *Plymouth County;* Boston, Chelsea, Revere ,and Winthrop, in *Suffolk County.*

Michigan.—Erie, LaSalle, and Monroe, in *Monroe County.*

New Hampshire.—Atkinson, Hampton, Hampton Falls, Kingston, New Castle, Newington, North Hampton, Plaistow, Portsmouth, Rye, Salem, and Seabrook, in *Rockingham County.*

New York (Eastern).—Albany, Berne, Bethlehem, Cohoes, Colonie, Guilderland, Knox, New Scotland, Rensselaerville, and Westerloo, in *Albany County;* Bleecker, Broadalbin, Caroga, Ephratah, Johnstown, Mayfield, Northampton, and Perth, in *Fulton County;* Benson, Hope, Lake Pleasant, and Wells, in *Hamilton County;* Amsterdam, Charleston, Florida, Glen, Mohawk, Palatine, and Root, in *Montgomery County;* Brunswick, East Greenbush, North Greenbush, Poestenkill, Schaghticoke, and Troy in *Rensselaer County;* Ballston, Charlton, Clifton Park, Corinth, Day, Edinburg, Galway, Greenfield, Hadley, Halfmoon, Malta, Milton, Northumberland, Providence, Saratoga, Saratoga Springs, Stillwater, and Wilton, in *Saratoga County;* Duanesburg, Glenville, Niskayuna, Princetown, Rotterdam, and Schenectady, in *Schenectady County;* Cobleskill, Esperance, Middleburg, Schoharie, and Wright, in *Schoharie County;* Easton, Fort Edward, Greenwich, and White Creek, in *Washington County;* Luzerne, in *Warren County.*

New York (Western).—Ashford, Dayton, East Otto, Leon, Otto, Perrysburg, and Persia, in *Cattaraugus County;* Arkwright, Charlotte, Chautauqua, Cherry Creek, Dunkirk, Ellery, Ellicott, Gerry, Hanover, Mina, Pomfret, Portland, Ripley, Sheridan, Sherman, Stockton, Villenova, and Westfield, in *Chautauqua County;* Amherst, Aurora, Boston, Brant, Buffalo, Clarence, Collins, Concord, Cheektowaga, East Hamburg, Eden, Elma, Evans, Grand Island, Hamburg, Marilla, North Collins, Tonawanda, and West Seneca, in *Erie County;* Niagara and Wheatfield, in *Niagara County.*

Ohio.—Ashtabula, Conneaut, Geneva, Kingsville, Monroe, and Saybrook, in *Ashtabula County;* Cleveland, Dover, Euclid, Rockport, and West Park, in *Cuyahoga County;* Berlin, Huron, Kelleys Island, Portland, and Vermilion, in *Erie County;* Concord, Madison, Mentor, Painesville, Perry, and Willoughby, in *Lake County;* Avon, Avon Lake, Black River, Brownhelm, Elyria and Sheffield, in *Lorain County;* Jerusalem, Oregon, Toledo, and Washington, in *Lucas County;* Bay, Benton, Carroll, Catawba Island, Danbury, Erie, Middle Bass Island, North Bass Island, Portage, and South Bass Island, in *Ottawa County.*

Pennsylvania.—Fairview, Girard, Greene, Greenfield, Harbor Creek, McKean, Mill Creek, North East, Presque Isle, Peninsula, Springfield, Summit, and Venango, in *Erie County.*

The infested areas may be extended or reduced, as found necessary by the Secretary of Agriculture. Due notice of any extension or reduction and the areas affected thereby will be given in writing to the transportation companies doing business in or through the State in which the infested area is

located, and by publication in newspapers selected by the Secretary of Agriculture within the State in which the areas affected are located.

REGULATION 4. INSPECTION AND CERTIFICATION A CONDITION OF MOVEMENT FROM INFESTED AREAS.—Corn and broom corn (including all parts of the stalk), all sorghums, and Sudan grass from infested areas in New York, Pennsylvania, Ohio, and Michigan; and corn and broom corn (including all parts of the stalk), all sorghums, Sudan grass, celery, green beans in the pod, beets with tops, spinach, rhubarb, oat and rye straw as such or when used as packing, cut flowers or entire plants of chrysanthemum, aster, cosmos, zinnia, hollyhock, and cut flowers or entire plants of gladiolus and dahlia, except the bulbs thereof, without stems, from infested areas in Massachusetts and New Hampshire, shall not be moved or allowed to move interstate to any point outside the infested areas quarantined for the corn borer unless and until such plants and plant products have been inspected by the United States Department of Agriculture and certified to be free from the corn borer. In the case of any of the articles enumerated in this regulation where absolute freedom from infestation can not be determined by the inspector of the Department of Agriculture, certification will be refused: *Provided*, That in the case of corn and broom corn (including all parts of the stalk), all sorghums, Sudan grass, cut flowers or entire plants of chrysanthemum, aster, cosmos, zinnia, hollyhock, and cut flowers or entire plants of gladiolus and dahlia, except the bulbs thereof, without stems, this quarantine and these regulations shall apply throughout the year; in the case of all other products, for the period between June 1 and December 31.

REGULATION 5. MARKING AND CERTIFICATION A CONDITION OF INTERSTATE TRANSPORTATION.—Every car, box, bale, or other container of plants and plant products of which inspection is required by these regulations shall be plainly marked with the name and address of the consignor and the name and address of the consignee, and shall bear a certificate showing that the contents have been inspected by the United States Department of Agriculture and found to be free from corn-borer infestation.

The inspection certificates in the case of carload and other bulk shipments shall accompany the waybills, conductors' manifests, memoranda, or bills of lading pertaining to such shipments.

Certificates of inspection will issue only for plants and plant products which have been actually inspected by the United States Department of Agriculture: *Provided*, That when in the case of individual premises or districts within an infested area in any of the quarantined States it shall be determined by competent inspection that the corn borer does not infest any of the cultivated products grown in such premises or districts and that said premises or districts have been maintained in such condition of freedom from weeds or vegetable growths other than the cultivated products designated as to prevent possibility of occurrence of the corn borer through such agencies, a permit may be issued (valid until revoked) by the inspector of the Department of Agriculture stating that such premises or districts have been inspected and found free from the corn borer and free from weeds or other extraneous vegetation capable of harboring the corn borer, and authorizing the shipment from said premises or districts of any of the articles subject to this quarantine grown therein. Copies of such permits shall be attached to small packages, or in the case of bulk shipments, to waybills, conductors' manifests, memoranda, or bills of lading pertaining thereto, and may be accepted by transportation companies in lieu of certificates of inspection.

REGULATION 6. CONDITIONS UNDER WHICH PLANTS AND PLANT PRODUCTS ORIGINATING OUTSIDE OF THE INFESTED AREAS MAY BE SHIPPED FROM POINTS

WITHIN THE INFESTED AREAS.—Plants and plant products of which the interstate movement is restricted by these regulations which originate outside of the infested area quarantined for the corn borer may be shipped interstate from points within the infested areas to points outside such areas under permit from the Secretary of Agriculture. Permits will issue only for plants and plant products which are not infested with the corn borer and transportation companies shall not accept or move interstate from within the infested areas such plants and plant products originating outside the infested areas unless each shipment is accompanied by a permit issued by the United States Department of Agriculture.

REGULATION 7. CONDITIONS GOVERNING INSPECTION AND ISSUANCE OF CERTIFICATES.—Persons intending to move or allow to be moved interstate plants and plant products for which certificates of inspection are required by these regulations will make application therefor as far as possible in advance of the probable date of shipment. Applications should show the nature and quantity of the plants or plant products which it is proposed to move, together with their exact location and, if practicable, the contemplated date of shipment. Applicants for inspection will be required to assemble the articles to be inspected and so to place them that they can be readily examined. If not so placed, inspection may be refused. All charges for storage, cartage, and labor incident to inspection other than the services of inspectors shall be paid by the shipper.

REGULATION 8. *Thorough cleaning required of cars, boats, and other vehicles before moving interstate.*—Cars, boats, and other vehicles which have been used in transporting within the infested areas plant products covered by these regulations or any other articles which may hereafter be made subject thereto shall not be moved or allowed to move interstate unless the same shall have been thoroughly swept out and cleaned by the carrier at the point of unloading or destination of all litter and rubbish from such regulated articles. No litter, rubbish, or refuse from any such plants and plant products shall be moved or allowed to move interstate.

REGULATION 9. *Shipments by United States Department of Agriculture.*—This quarantine shall not apply to the movement by the United States Department of Agriculture of the products named for experimental or scientific purposes.

This notice of quarantine, effective November 15, 1921, amends and supersedes Notice of Quarantine No. 43, promulgated March 15, 1920, as amended, and shall be in force until further notice.

Done in the District of Columbia this 29th day of October, 1921.

Witness my hand and the seal of the United States Department of Agriculture.

[SEAL.]

HENRY C. WALLACE,
Secretary of Agriculture.

EUROPEAN CORN BORER QUARANTINE EXTENDED.

(Press notice.)

WASHINGTON, *D. C., November 3, 1921.*

Decision to continue its fight against the European corn borer in this country along the lines now pursued was announced here to-day by the Federal Horticultural Board of the United States Department of Agriculture. A revision of the present quarantine, effective November 15, includes the new territory, chiefly along the southern shore of Lake Erie, now known to be infested by the pest, as well as such adjacent areas as is necessary to afford a reasonable zone of safety and to meet the needs of local markets.

Under the new quarantine notice made public to-day, the quarantine has been further modified as to the western areas, where the insect is one-brooded, by the limitation of the restricted products to corn and related plants. The quarantine as revised covers the areas of infestation in Massachusetts and New Hampshire, in eastern and western New York, in Erie County, Pa., and the Lake strip in northern Ohio, together with three townships bordering Lake Erie in Monroe County, Mich. The revision embodies the unanimous recommendations of the States represented at the public hearing held by the board on October 11.

The quarantine as it goes into effect November 15 will involve a continuation of the control measures substantially on the present basis both as to the nature of the restrictions enforced and as to the cost to the Federal Government. It is believed that the control can be extended to the added territory without increase in the current appropriation for the work, which is $275,000. This is on the basis of State cooperation and aid, assurances of which have been given by most of the States concerned. At the hearing in October, representatives of most of the States gave assurances that Government money spent in their States would be matched by an equal amount of State funds for the control work.

QUARANTINE ON ACCOUNT OF THE EUROPEAN CORN BORER AND OTHER DANGEROUS INSECTS AND PLANT DISEASES.

NOTICE OF QUARANTINE NO. 41, WITH REGULATIONS (REVISED).

(Effective July 21, 1921.)

The fact has been determined by the Secretary of Agriculture, and notice is hereby given, that dangerous plant pests, including the so-called European corn borer (*Pyrausta nubilalis* Hubn.), and also other dangerous insects, as well as plant diseases not heretofore widely prevalent or distributed within and throughout the United States, exist, as to one or more of such pests, in Europe, Asia, Africa, Dominion of Canada, Mexico, Central and South America, and other foreign countries and localities, and may be introduced into this country through importations of (1) the stalks or other parts of Indian corn or maize, broom corn, and related plants, and (2) through importations of celery, green beans in the pod, beets with tops, spinach, rhubarb, oat or rye straw as such or when used as packing, cut flowers or entire plants of chrysanthemum, aster, cosmos, zinnia, hollyhock, and cut flowers or entire plants of gladiolus and dahlia, except the bulbs thereof, without stems, from the Dominion of Canada.

Now, therefore, I, Henry C. Wallace, Secretary of Agriculture, under the authority conferred by the act of Congress approved August 20, 1912, known as the Plant Quarantine Act (37 Stat. 315), do hereby declare that it is necessary, in order to prevent the further introduction of the dangerous plant pests mentioned above, to forbid, except as provided in the rules and regulations supplemental hereto, the importation into the United States from all foreign countries and localities of the stalk and all other parts, whether used for packing or other purposes, in the raw or unmanufactured state, of (1) Indian corn or maize (*Zea mays* L.), broom corn (*Andropogon sorghum* var. *technicus*), sweet sorghums (*Andropogon sorghum*), grain sorghums (*Andropogon sorghum*), Sudan grass (*Andropogon sorghum sudanensis*), Johnson grass (*Andropogon halepensis*), sugar cane (*Saccharum officinarum*), including Japanese varieties, pearl millet (*Pennisetum glaucum*), napier grass (*Pennisetum purpureum*), teosinte (*Euchlaena luxurians*), and Job's tears (*Coix lachryma-Jobi*), and (2) celery, green beans in the pod, beets with tops, spinach, rhubarb, oat or rye straw as such or when used as packing, cut flowers or entire plants of chrysanthemum, aster, cosmos, zinnia, hollyhock, and cut flowers or entire plants

of gladiolus and dahlia, except the bulbs thereof, without stems, from the Dominion of Canada.

Hereafter, and until further notice, by virtue of said act of Congress approved August 20, 1912, the importation into the United States of the stalk and all other parts of the first series of plants enumerated above from all foreign countries and localities, and of the second series of plants enumerated above from the Dominion of Canada, except as provided in the rules and regulations supplemental hereto, is prohibited.

Done in the District of Columbia this 8th day of July, 1921.

Witness my hand and the seal of the United States Department of Agriculture.

[SEAL.] HENRY C. WALLACE,
Secretary of Agriculture.

RULES AND REGULATIONS SUPPLEMENTAL TO NOTICE OF QUARANTINE NO. 41 (REVISED), GOVERNING THE IMPORTATION OF INDIAN CORN OR MAIZE, BROOM CORN, AND RELATED PLANTS.

REGULATION 1. SORGHUM HAY, GRAIN, AND SEEDS FOR WHICH PERMIT IS NOT REQUIRED.—Sorghum hay from Canada, and clean shelled or threshed grain (from any country) of the plants covered in this quarantine, except as to such grain or seeds covered by special quarantine and other restrictive orders now in force, or such as may hereafter be made subject to special quarantines, may be imported without permit or other compliance with these regulations.[1]

REGULATION 2. BROOM CORN FOR MANUFACTURING PURPOSES PERMITTED ENTRY UNDER REGULATION.—The importation of broom corn for manufacturing purposes may be permitted under the conditions hereinafter set forth in these regulations: *Provided*, That for the purpose of these regulations broom corn, even though made up into brooms or similar articles, will be considered in the raw state unless its manufacture into such brooms or other articles involves the substantial elimination of stems or such treatment of the included stems as shall preclude such articles from being the means of carriage of the European corn borer and other dangerous insects and plant diseases.

REGULATION 3. APPLICATION FOR PERMITS FOR IMPORTATION OF BROOM CORN.—Persons contemplating the importation of broom corn shall first make application to the Federal Horticultural Board for a permit, stating in the application the name and address of the exporter, the country and locality where grown, the port of entry, and the name and address of the importer in the United States to whom the permit should be sent.

Applications for permits should be made in advance of the proposed shipments; but if, through no fault of the importer, a shipment should arrive before a permit is received, the importation will be held in customs custody, at the risk and expense of the importer, for a period not exceeding 20 days pending the receipt of the permit.

Applications may be made by telegraph, in which case the information required above must be given.

REGULATION 4. ISSUANCE OF PERMITS.—On approval by the Secretary of Agriculture of an application for the importation of broom corn, a permit

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[1] The entry of the following plants and plant products is prohibited or restricted by specific quarantine and other restrictive orders now in force:

(*a*) Living canes of sugar cane, or cuttings or parts thereof, including seed from all foreign countries.

(*b*) Seed and all other portions in the raw or unmanufactured state of Indian corn or maize (*Zea mays* L.), and the closely related plants, including all species of Teosinte (*Euchlaena*), Job's tears (*Coix*), *Polytoca*, *Chionachne*, and *Sclerachne*, from southeastern Asia (including India, Siam, Indo-China, and China), Malayan Archipelago, Australia, New Zealand, Oceania, Philippine Islands, Formosa, Japan, and adjacent islands.

will be issued in quadruplicate. One copy will be furnished to the applicant for presentation to the customs officer at the port of entry, one copy will be mailed to the collector of customs and one to the inspector of the Department of Agriculture at the port of entry, and the fourth will be filed with the application.

A separate permit will be required for each importation, and these permits will be issued for the ports of Boston, New York, San Francisco, and Seattle, and such other ports as may from time to time be approved by the Federal Horticultural Board. The permit will be addressed to the collector of customs at the port for which it is issued.

Regulation 5. Disinfection a Condition of Entry.—As a condition of entry all importations of broom corn shall be free from visible evidence of borer injury both with respect to borings in the butts and exit holes in the stalks, and shall be subject to such disinfection as shall be required by the inspector of the Department of Agriculture. Should any importation of broom corn prove on inspection at port of entry to be so infested with the corn borer or other insect pest, or with plant diseases that in the judgment of the inspector it can not be freed from such infestation by disinfection or other treatment, the entire shipment shall be refused entry.

When entry under disinfection is permitted, the broom corn will be delivered to the permittee for disinfection upon the filing with the collector of customs of a bond in the amount of $5,000, or in an amount equal to the invoice value, if such value be less than $5,000, with approved sureties, the condition of which shall be that the broom corn shall be disinfected under the supervision of an inspector of the Department of Agriculture; that no bale or other container thereof shall be broken, opened, or removed from the port of entry unless and until a written notice is given to such collector by an inspector of the Department of Agriculture that the broom corn has been properly disinfected, and that the importation shall be redelivered to the collector of customs within 40 days after arrival at the port of entry.

Regulation 6. Notice of Arrival by Permittee.—Immediately upon arrival of the broom corn at the port of entry the permittee shall submit in duplicate notice to the Secretary of Agriculture, through the collector of customs, on forms provided for that purpose, stating the number of the permit, date of entry, name of ship or vessel, the country and locality where grown, name of the foreign shipper, number of bales and marks and numbers on bales, the port of entry, and the name of the importer or broker at the port of entry.

Regulation 7. Importations of Other Articles from the Dominion of Canada.—Celery, green beans in the pod, beets with tops, spinach, rhubarb, oat or rye straw as such or when used as packing, cut flowers or entire plants of chrysanthemum, aster, cosmos, zinnia, hollyhock, and cut flowers or entire plants of gladiolus and dahlia, except the bulbs thereof, without stems, may be imported from the Province of Ontario, Canada, only if accompanied by a certificate from the authorities of the Canadian Department of Agriculture to the effect that the plants or plant products have been inspected and found to be free from the European corn borer and other dangerous insect pests and plant diseases: *Provided*, That until further notice the articles above named may be imported from other portions of Canada without restriction under this quarantine.

Regulation 8. Importations by the United States Department of Agriculture Permitted.—These regulations shall not apply to the importation by the United States Department of Agriculture of the articles covered by this quarantine for experimental or scientific purposes.

The above rules and regulations are hereby adopted, supersede Notice of Quarantine No. 41 with regulations, promulgated February 21, 1920, as modified by Amendment No. 1 to regulations supplemental to Notice of Quarantine No. 41, promulgated July 31, 1920, and shall be in force until further notice.

HENRY C. WALLACE,
Secretary of Agriculture.

JULY 8, 1921.

APPLY CORN BORER QUARANTINE TO PRODUCTS FROM ONTARIO.

(Press notice.)

WASHINGTON, D. C., *July 21, 1921.*

A revision of Quarantine No. 41, designed to make more effective its measures against the importation of the European corn borer and other dangerous plant pests into this country, was announced to-day by the Secretary of Agriculture, to become effective July 21, 1921.

The primary object of the revision is to guard against the entry of the corn borer from Canada through the shipment of celery, green beans in the pod, beets with tops, spinach, rhubarb, oat or rye straw as such or when used as packing, cut flowers or entire plants of chrysanthemum, aster, cosmos, zinnia, hollyhock, and cut flowers or entire plants of gladiolus and dahlia, except the bulbs thereof, without stems. It extends to importations of these plants and plant products from Canada the same restrictions at present imposed on the interstate movement of these articles under the domestic corn borer quarantine.

Until further notice the restrictions apply only to the Province of Ontario, the only locality in Canada known at present to be infested with this destructive insect pest. Thus far the domestic quarantine has been successful in holding the borer in check and confining it to sections of New York and several New England States, where it was originally discovered in this country.

THE GIPSY MOTH AND BROWN-TAIL MOTH.

MODIFICATION OF GIPSY MOTH AND BROWN-TAIL MOTH QUARANTINE.

Amendment No. 2 to Regulations Supplemental to Notice of Quarantine No. 45.

(Effective on and after January 1, 1922.)

Under authority conferred by the plant quarantine act of August 20, 1912 (37 Stat., 315), as amended by the act of Congress approved March 4, 1917 (39 Stat., 1134, 1165), it is ordered that regulation 3 of the rules and regulations supplemental to Notice of Quarantine No. 45, on account of the gipsy moth and brown-tail moth, as modified by Amendment No. 1 which became effective July 1, 1921, be, and the same is hereby, further amended by transferring the towns of Fitzwilliam, *New Hampshire;* Royalston, Athol, Philipston, Templeton, Hubbardston, Rutland, Paxton, and Leicester, *Massachusetts;* and Narragansett, *Rhode Island*, from the lightly infested area, as specified in said amendment, to the generally infested area.

Until further order, therefore, the towns of Fitzwilliam, *New Hampshire;* Royalston, Athol, Phillipston, Templeton, Hubbardston, Rutland, Paxton, and Leicester, *Massachusetts;* and Narragansett, *Rhode Island*, shall be classed among the towns in the generally infested area.

Done at the city of Washington this 23d day of December, 1921.

Witness my hand and the seal of the United States Department of Agriculture.

[SEAL.] HENRY C. WALLACE,
Secretary of Agriculture.

CHANGE OF QUARANTINE AREA ON ACCOUNT OF GIPSY MOTH AND BROWN-TAIL MOTH.

(Press notice.)

WASHINGTON, D. C., *December 29, 1921.*

Ten towns in New Hampshire, Massachusetts, and Rhode Island are transferred from the lightly infested gipsy moth area to the generally infested gipsy moth area according to regulations supplemental to Notice of Quarantine No. 45 on account of the gipsy moth and brown-tail moth. The amendment becomes effective January 1, 1922, according to an announcement made to-day by the Federal Horticultural Board of the United States Department of Agriculture. This transfer is based on actual condition of infestation and will simplify the enforcement of the quarantine by lessening the inspection and certification. The towns included are Fitzwilliam, N. H.; Royalston, Athol, Phillipston, Templeton, Hubbardston, Rutland, Paxton, and Leicester, Mass.; and Narragansett R. I.

THE JAPANESE BEETLE.

QUARANTINE ON ACCOUNT OF JAPANESE BEETLE.

NOTICE OF QUARANTINE NO. 48, WITH REGULATIONS (REVISED).

(Effective on and after January 1, 1922. Supersedes No. 48, as amended.)

The fact has been determined by the Secretary of Agriculture, and notice is hereby given, that an injurious insect, the Japanese beetle (*Popillia japonica* Newm.), new to and not heretofore widely distributed within and throughout the United States, exists in portions of the States of New Jersey and Pennsylvania.

Now, therefore, I, C. W. Pugsley, Acting Secretary of Agriculture, under authority conferred by section 8 of the Plant Quarantine Act, approved August 20, 1912 (37 Stat., 315), as amended by the act of Congress approved March 4, 1917 (39 Stat., 1134, 1165), do hereby quarantine the States of New Jersey and Pennsylvania, effective as to the areas in these States now, or which may hereafter be, designated by the Secretary of Agriculture as infested by the Japanese beetle, and by this Notice of Quarantine No. 48 (revised) do order that (1) farm, garden, and orchard products of all kinds; (2) grain and forage crops of all kinds; (3) nursery, ornamental, and greenhouse stock, and all other plants; and (4) soil, compost, and manure other than fresh manure shall not be moved or allowed to be moved interstate from either of said States in manner or method or under conditions other than those prescribed in the rules and regulations supplemental hereto: *Provided*, That the limitation of the restrictions of this quarantine and the rules and regulations supplemental thereto to the areas in a quarantined State now, or which may hereafter be, designated by the Secretary of Agriculture as infested by the Japanese beetle, shall be conditioned upon the establishment and enforcement by the State of such control measures in cooperation with the United States Department of Agriculture with respect to the designated infested areas as in the judgment of the Secretary of Agriculture shall be deemed adequate to effect the control and prevent the spread of the Japanese beetle.

Done in the District of Columbia this 28th day of November, 1921.

Witness my hand and the seal of the United States Department of Agriculture.

[SEAL.] C. W. PUGSLEY,
Acting Secretary of Agriculture.

RULES AND REGULATIONS SUPPLEMENTAL TO NOTICE OF QUARANTINE NO. 48 (REVISED).

REGULATION 1. DEFINITIONS.—For the purpose of these regulations the following words, names, and terms shall be construed, respectively, to mean:

(*a*) Japanese beetle: The insect known as the Japanese beetle (*Popillia japonica* Newm.).

(*b*) Quarantined area: Any State quarantined by the Secretary of Agriculture upon determination by him that the Japanese beetle exists therein.

(*c*) Infested area: Those portions of any quarantined State which are designated by the Secretary of Agriculture as infested with the Japanese beetle.

(*d*) Inspector: An inspector of the United States Department of Agriculture.

REGULATION 2. PLANTS AND PLANT PRODUCTS AND OTHER ARTICLES SUBJECT TO RESTRICTION.—Until further notice the restrictions on the movement of plants and plant products and other articles covered in this Notice of Quarantine No. 48 (revised), and in the rules and regulations supplemental thereto, shall apply only to the articles enumerated in regulation 4 below, originating in, or moving from, the areas in the quarantined States now, or which may hereafter be, designated by the Secretary of Agriculture as infested areas.

No restrictions are placed by this quarantine and the regulations supplemental thereto on the interstate movement of the articles enumerated therein from all points in the quarantined States outside of the areas now, or which may hereafter be, designated by the Secretary of Agriculture as infested areas.

REGULATION 3. INFESTED AREAS.—All the townships listed in this regulation are designated as infested by the Japanese beetle. The area thus designated is understood to include all the cities, towns, boroughs, and other political subdivisions within the limits of the listed townships in New Jersey and Pennyslvania.

For the purpose of inspection and transportation the townships so designated are divided into two areas, to be known as the heavily infested area and the lightly infested area.

The following townships comprise the heavily infested area:

New Jersey.—Townships of Palmyra, Cinnaminson, Delran, Riverside, Chester, Mount Laurel, Northampton, Evesham, Lumberton, Westhampton, Burlington, Willingboro, and Beverly in *Burlington County;* city of Camden, townships of Pensauken, Delaware, Haddon, and Center, and the borough of Magnolia in *Camden County.*

Pennsylvania.—Wards 45, 23, 35, and 41 of the city of Philadelphia in *Philadelphia County;* townships of Bensalem and Bristol in *Bucks County.*

The following townships comprise the lightly infested area:

New Jersey.—Townships of Florence, Springfield, Easthampton, Medford, and Southampton, in *Burlington County;* townships of Gloucester, Voorhees, Clementon, and Berlin, in *Camden County;* townships of West Deptford and Deptford, in *Gloucester County.*

Pennsylvania.—Wards 33 and 42 of the city of Philadelphia, in *Philadelphia County;* townships of Cheltenham, Abington, and Moreland, in *Montgomery County;* townships of Southampton and Middletown, in *Bucks County.*[1]

REGULATION 4. REGULATION OF MOVEMENT OF PLANTS AND PLANT PRODUCTS AND OTHER ARTICLES ORIGINATING IN INFESTED AREAS.—From the heavily infested area (1) sweet, green or sugar corn, grapes, lettuce, cabbage, and forage crops of all kinds, including hay and straw; (2) nursery, ornamental, and greenhouse stock, and all other plants except bulbs and cut flowers; and (3) soil, compost, and manure other than fresh manure, shall not be moved or allowed to be

[1] See map in Appendix.

moved interstate to any point outside the infested area quarantined for the Japanese beetle unless and until such articles have been inspected by the United States Department of Agriculture and certified to be free from the Japanese beetle: *Provided*, That in the case of sweet, green or sugar corn, grapes, lettuce, and forage crops of all kinds, including hay and straw, this quarantine and these regulations shall apply for the period between June 15 and October 15; in the case of all other products, throughout the year.

From the lightly infested area (1) nursery, ornamental, and green-house stock, and all other plants except bulbs and cut flowers; and (2) soil, compost, and manure other than fresh manure, shall not be moved or allowed to be moved interstate to any point outside the infested area quarantined for the Japanese beetle unless and until such articles have been inspected by the United States Department of Agriculture and certified to be free from the Japanese beetle. This requirement applies throughout the year.

In the case of any of the articles enumerated in this regulation where absolute freedom from infestation can not be determined by the inspector of the United States Department of Agriculture, certification will be refused.

Regulation 5. Extension or Reduction of Infested Areas.—The infested areas designated in regulation 3 may be extended or reduced, as found necessary by the Secretary of Agriculture. Due notice of any extension or reduction and the areas affected thereby will be given in writing to the transportation companies doing business in or through the States in which these areas are located, and by publication in newspapers selected by the Secretary of Agriculture within the States in which the areas affected are located.

Regulation 6. Inspection, Certification, and Marking a Condition of Interstate Transportation.—Each car, vehicle, box, basket, or other container of the articles enumerated in regulation 4 shall be plainly marked with the name and address of the consignor and the name and address of the consignee, and shall bear a certificate stating that the contents have been inspected by the United States Department of Agriculture and found to be free from the Japanese beetle: *Provided*, That in the case of such articles moved in carload or other bulk shipments the certificate of inspection shall accompany the waybills, conductors' manifests, memoranda, or bills of lading, or, in case of truck or other road vehicle, the certificate of inspection shall accompany the vehicle: *Provided further*, That in the case of individual farms or districts within the infested area on which the insect has not thus far been found, shipments from said farms or districts in bulk or small packages may be authorized under a permit (valid until revoked) stating that said farms and districts have been inspected by the United States Department of Agriculture and found free from the Japanese beetle. Copies of such permit shall be attached to small packages, or, in the case of bulk shipments, to waybills, conductors' manifests, memoranda, or bills of lading pertaining thereto, and shall be accepted by transportation companies in lieu of certificate of inspection.

Regulation 7. Conditions Governing Inspection and Issuance of Permits.—Persons intending to move or allow to be moved interstate any of the articles enumerated in regulation 4, for which certificates of inspection or permits are required by these regulations, will make application therefor as far as possible in advance of the probable date of shipment. Applicants for certificates will be required to assemble the articles at such points as the inspector of the Department of Agriculture shall designate, and so to place them that the inspection may readily be made. All charges for storage, cartage, and labor incident to inspection other than the services of the inspectors shall be paid by the shipper.

REGULATION 8. THOROUGH CLEANING REQUIRED OF TRUCKS, WAGONS, BOATS, AND OTHER VEHICLES BEFORE MOVING INTERSTATE.—Trucks, wagons, boats, and other vehicles which have been used in transporting any article covered by this quarantine within the infested district shall not be moved or allowed to be moved interstate unless the same shall have been thoroughly swept and cleaned before they are employed in interstate transportation.

This notice of quarantine, effective January 1, 1922, supersedes Notice of Quarantine No. 48, as amended, promulgated September 30, 1920, and shall be in force until further notice.

Done in the District of Columbia this 28th day of November, 1921.

Witness my hand and the seal of the United States Department of Agriculture.

[SEAL.]

C. W. PUGSLEY,
Acting Secretary of Agriculture.

APPENDIX.

MAP SHOWING AREA UNDER REGULATION AS INFESTED BY JAPANESE BEETLE.

Explanation of map.—The movement of sweet corn, grapes, lettuce, and forage crops, including hay and straw, from within the area inclosed by the broken black line is restricted. (See regulation 4.)

The movement of nursery, ornamental, and greenhouse stock, soil, compost, and manure other than fresh manure is restricted from within the areas inclosed by both the heavy broken line and the heavy solid line. (See regulation 4.)

STATE QUARANTINES.

The States of New Jersey and Pennsylvania have promulgated quarantines restricting intrastate movement supplemental to the Federal quarantine. These State quarantines are enforced in cooperation with the Federal authorities. Copies of either the Federal or State quarantine orders may be obtained by addressing Japanese Beetle Laboratory, Riverton, N. J. Bell telephone—Riverton 505.

PENALTIES.

The Plant Quarantine Act of August, 20, 1912 (37 Stat., 315), provides that any person who shall violate any of the provisions of this act, or who shall forge, counterfeit, alter, deface, or destroy any certificate provided for in this act or in the regulations of the Secretary of Agriculture, shall be deemed guilty of a misdemeanor and shall, upon conviction thereof, be punished by a fine not exceeding $500 or by imprisonment not exceeding one year, or both such fine and imprisonment, in the discretion of the court.

JAPANESE BEETLE QUARANTINE AREA TO BE EXTENDED.

(Press notice.)

WASHINGTON, D. C., *December 7, 1921.*

Increasing spread of the Japanese beetle, a serious crop insect pest, in Pennsylvania and New Jersey has necessitated an extension of the areas under Federal quarantine, the Federal Horticultural Board, United States Department of Agriculture, announced to-day in making public a revised notice of quarantine effective January 1, 1922. The total area is increased from 90 to 275 square miles, two classes of quarantined areas being established depending upon whether or not they are heavily or lightly infested. Regulations governing the shipment of plants are established for each class of territory. * * *

In the heavily infested area all products covered by the quarantine are to be given the strictest possible inspection before being allowed shipment to outside points. In the lightly infested area inspection and certification will be maintained of all nursery, ornamental and greenhouse stock, and soil, compost and manure other than fresh manure, as being the chief source of danger in spreading the pest to distant points.

"The possibilities of danger by the Japanese beetle," declared Dr. Charles L. Marlatt, chairman of the Federal Horticultural Board, in discussing the quarantine action, "have probably not been fully realized, but this insect undoubtedly is bound to be one of the major crop pests of the country. It is fully realized by the State and Federal experts associated in the effort to control this newly imported pest that from the very nature of the insect and its habits it is impossiible to prevent its natural spread of several miles yearly by any reasonable restrictions that are possible of enforcement or any reasonable expenditure of money. All that can be done, therefore, we believe, is to prevent by such quarantine measures as appear to be practicable spread by wide jumps or long-distant movement with products originating in the infested areas."

The insect was introduced into the United States some 10 years ago with an importation of iris roots from Japan, and thus far has been found only in New Jersey and Pennsylvania.

THE MEXICAN BEAN BEETLE.

NOTICE OF LIFTING OF MEXICAN BEAN BEETLE QUARANTINE.

(Effective on and after July 23, 1921.)

The fact has been determined by the Secretary of Agriculture, as a result of investigations and surveys, that the Mexican bean beetle (*Epilachna corrupta*

Muls.), on account of which Notice of Quarantine No. 50, with regulations, was promulgated April 8, 1921, effective on and after May 1, 1921, and which covered a portion of the State of Alabama, is now known to have considerably extended its range in Alabama, to occur widely in Georgia and Tennessee, and scatteringly in South Carolina and Kentucky. It has been found in Georgia within ten miles of the Florida State line and there is every reason to believe that further surveys will determine its presence in other near-by States. From the department's experience with this pest during the past four or five months, the conclusion has been reached that on account of its habits the Mexican bean beetle is not amenable to successful control by quarantine.

Now, therefore, I, Henry C. Wallace, Secretary of Agriculture, under authority conferred by the Plant Quarantine Act, approved August 20, 1912 (37 Stat., 315), as amended by the act of Congress approved March 4, 1917 (39 Stat., 1134, 1165), do hereby remove and revoke the quarantine placed by said Notice of Quarantine No. 50 upon the State of Alabama and do also hereby revoke the rules and regulations supplemental thereto, such revocation to take effect on July 23, 1921.

Done in the District of Columbia this 22d day of July, 1921.

Witness my hand and the seal of the United States Department of Agriculture.

[SEAL.] HENRY C. WALLACE,
Secretary of Agriculture.

BEAN BEETLE WIDESPREAD—ALABAMA QUARANTINE RAISED.

(Press notice.)

WASHINGTON, D. C., *July 25, 1921.*

The release of the State of Alabama from quarantine on account of the Mexican bean beetle, a very destructive crop pest, was announced to-day by the Federal Horticultural Board of the United States Department of Agriculture. The order signed by Secretary Wallace became effective July 23. This action was decided upon on account of recent developments in the scouting campaign against the beetle in the South, which showed a much greater present distribution than was estimated at the end of last season.

At the time the quarantine order was promulgated, the infested area was believed to be confined to 13 counties in Alabama, and to cover an area of about 3,500 square miles. Scouting during the present summer shows that the beetle is present in injurious numbers over about 10,000 square miles in the States of Alabama, Georgia, and Tennessee, and is distributed, although as yet thinly, over an additional 20,000 square miles in these States, as well as in Kentucky and South Carolina.

Latest reports show the insect to be within 10 miles of Florida, 16 miles of Mississippi, 3 miles of North Carolina, and 23 miles of Virginia. The varied nature of crops grown over this large territory renders the practical application of regulated quarantine difficult, if not impossible, with the funds available, say officials of the board. Moreover, a material hardship, they believe, would be occasioned to the general agricultural development of this region should such a quarantine be enforced.

It is evident, officials say, from the present distribution of this insect east of the Mississippi River either that the rate of spread is much greater than was originally believed possible, or that the original introduction took place at a date several years earlier than reports would indicate. In either case, the con-

tinuation of the quarantine was thought unjustifiable in the light of present information, as the economic loss through its enforcement would more than counterbalance the gain.

THE SATIN MOTH.

NOTICE OF PUBLIC HEARING TO CONSIDER THE ADVISABILITY OF QUARANTINING THE STATES OF NEW HAMPSHIRE AND MASSACHUSETTS ON ACCOUNT OF THE SATIN MOTH.

WASHINGTON, D. C., *November 8, 1921.*

The Secretary of Agriculture has information that the satin moth (*Stilpnotia salicis* L.), a dangerous insect not heretofore widely prevalent or distributed within and throughout the United States, exists in portions of the States of New Hampshire and Massachusetts.

It appears necessary, therefore, to consider the advisability of quarantining the States of New Hampshire and Massachusetts in accordance with the Plant Quarantine Act of August 20, 1912 (37 Stat., 315) as amended by the act of Congress approved March 4, 1917 (39 Stat., 1134, 1165), prohibiting or restricting the movement from these States, or from any infested districts determined therein, into other States and Territories of poplar, willow, and related plants.

Notice is, therefore, hereby given that a public hearing will be held at the United States Department of Agriculture, Washington, D. C., room 11, Federal Horticultural Board, at 10 a. m., December 13, 1921, in order that any person interested in the proposed quarantine may appear and be heard either in person or by attorney.

PROPOSED QUARANTINE AGAINST SATIN MOTH.

(Press notice.)

WASHINGTON, D. C., *November 8, 1921.*

The advisability of quarantining the States of New Hampshire and Massachusetts to check the spread of the satin moth, a dangerous insect pest newly discovered in this country, will be considered at a public hearing to be held by the Federal Horticultural Board, United States Department of Agriculture, here December 13. Any person interested in the proposed action by the board may appear and be heard either in person or by attorney.

Quarantine action, if decided upon, would prohibit or restrict the movement of the insect's principal carriers, poplar, willow, and related plants, from these States, or from any districts in them found to be infested with the pest, into other States and Territories.

The satin moth, so called from its white, satin-like appearance, occurs throughout Europe, and is particularly an enemy of poplar and willow. It was first reported in this country about July 1, 1920, in the Fellsway district north of Boston, but from its distribution and abundance, as later determined, it is thought that it then had undoubtedly been in the United States for several years. It has not been possible to determine the source of its introduction, but the department thinks it probable that the insect was brought in with some importations of willows or poplars.

The insects hibernate as small larvæ, webbed over and concealed in crevices of the bark, and are so hidden and inconspicuous as often to escape even the most careful inspection.

While this pest is looked upon as not of prime importance, it is a very serious enemy of the plants it attacks, and the prevention of its further distribution in the United States is highly desirable. Should quarantine action be decided upon, the control of interstate movement of its possible carriers can easily be taken care of in connection with the general moth quarantine against the gipsy

and brown-tail moths now being inforced by the department, in cooperation with the States concerned, over and far beyond the area now reached by the new pest.

The present known distribution of the satin moth covers a considerable area extending from Boston into southeastern New Hampshire and involves some 63 towns in Massachusetts and 7 in New Hampshire. It is proposed that any quarantine restrictions shall be limited to the areas within these States actually determined from time to time to be infested. The inclusion of these States, therefore, as a whole for the purpose of the forthcoming hearing is merely to make it possible in the future to add any new areas without the delay and publicity attending a formal notice of hearing.

QUARANTINE ON ACCOUNT OF THE SATIN MOTH—NOTICE OF QUARANTINE NO. 53.

[Effective on and after January 1, 1922.]

The fact has been determined by the Secretary of Agriculture, and notice is hereby given, that an injurious insect, the satin moth (*Stilpnotia salicis* L.) new to and not heretofore widely prevalent or distributed within and throughout the United States, exists in the States of New Hampshire and Massachusetts.

Now, therefore, I, Henry C. Wallace, Secretary of Agriculture, under authority conferred by section 8 of the Plant Quarantine Act of August 20, 1912, (37 Stat., 315), as amended by the act of Congress approved March 4, 1917 (39 Stat., 1134, 1165), do hereby quarantine the States of New Hampshire and Massachusetts, and by this Notice of Quarantine No. 53, effective on and after January 1, 1922, do order that no species or variety of poplar (Populus) and willow (Salix) shall be moved or allowed to be moved interstate from the said quarantined States in manner or method or under conditions other than those prescribed in the rules and regulations hereinafter made and amendments thereto: *Provided*, That the limitation of the restrictions of this quarantine and the rules and regulations supplemental thereto to the areas in a quarantined State now, or which may hereafter be, designated by the Secretary of Agriculture as infested by the satin moth, shall be conditioned upon the establishment and enforcement by the State of such control measures in cooperation with the United States Department of Agriculture with respect to the designated infested areas as in the judgment of the Secretary of Agriculture shall be deemed adequate to effect the control and prevent the spread of the satin moth.

Done at the City of Washington this 28th day of December, 1921.

Witness my hand and the seal of the United States Department of Agriculture.

[SEAL.] HENRY C. WALLACE,
Secretary of Agriculture.

RULES AND REGULATIONS SUPPLEMENTAL TO NOTICE OF QUARANTINE NO 53.

REGULATION 1. DEFINITIONS.—For the purpose of these regulations the following words, names, and terms shall be construed, respectively, to mean:

(*a*) Satin moth: The insect known as the satin moth (*Stilpnotia salicis* L.).

(*b*) Quarantined area: Any State quarantined by the Secretary of Agriculture upon determination by him that the satin moth exists therein.

(*c*) Infested area: Those portions of any quarantined State which are designated by the Secretary of Agriculture as infested with the satin moth.

REGULATION 2. PLANTS SUBJECT TO RESTRICTION.—The restriction on the movement of the plants covered in this Notice of Quarantine No. 53, and in the rules and regulations supplemental thereto, shall apply to the products enumerated in this notice of quarantine originating in or moving from the areas in the quarantined States now, or which may hereafter be, designated by the Secretary of Agriculture as infested areas.

No restrictions are placed by this quarantine and the regulations supplemental thereto on the interstate movement of the plants enumerated therein from points in the quarantined States outside of the areas now, or which may hereafter be, designated by the Secretary of Agriculture as infested areas.

REGULATION 3. INFESTED AREAS.—The following towns and all the territory between said towns and the Atlantic Ocean are designated as satin moth infested area:

Rye, North Hampton, Hampton, Hampton Falls, Seabrook, and South Hampton, *New Hampshire;* Merrimac and Haverhill, *Massachusetts;* Salem, *New Hampshire;* Methuen, Andover, Tewksbury, Lowell, Chelmsford, Billerica, Bedford, Concord, Sudbury, Framingham, Sherborn, Holliston, Millis, Natick, Needham, Boston, and Quincy, *Massachusetts;* also the town of Rockland, in Plymouth County, *Massachusetts.*

The infested areas may be extended or reduced as found necessary by the Secretary of Agriculture. Due notice of any extension or reduction and the areas affected thereby will be given in writing to the transportation companies doing business in or through the State in which the infested area is located and by publication in newspapers selected by the Secretary of Agriculture within the State in which the areas affected are located.

REGULATION 4. PROHIBITION OF MOVEMENT OF POPLARS AND WILLOWS ORIGINATING IN INFESTED AREAS.—On account of the practical impossibility of satisfactorily determining by inspection whether poplars and willows are free from satin moth infestation, due to the habit of the caterpillars of hibernating in inconspicuous webs on the bark of the trees, the movement of the plants named from any of the infested areas listed in regulation 3 hereof into or through any other State, Territory, or District, or portion thereof, not included within the aforesaid infested areas, is prohibited.

The above rules and regulations are hereby adopted, effective on and after January 1, 1922, and shall be in force until further notice.

[SEAL.] HENRY C. WALLACE,
Secretary of Agriculture.

QUARANTINE ESTABLISHED AGAINST SATIN MOTH.

(Press notice.)

WASHINGTON, D. C., *December 29, 1921.*

A Federal quarantine, effective January 1, against New Hampshire and Massachusetts to prevent the spread of the satin moth, a dangerous insect pest newly discovered in this country, has been announced by the Federal Horticultural Board, United States Department of Agriculture. The action by the department follows a hearing held here in December, when various phases of the situation were discussed.

The following towns and all territory between them and the Atlantic Ocean are designated in the quarantine notice as satin moth infested area:

Rye, North Hampton, Hampton Falls, Seabrook, and South Hampton, N. H.; Merrimac and Haverhill, Mass.; Salem, N. H.; Methuen, Andover, Tewksbury, Lowell, Chelmsford, Billerica, Bedford, Concord, Sudbury, Framingham, Sherborn, Holliston, Millis, Natick, Needham, Boston, and Quincy, Mass.; also the town of Rockland, in Plymouth County, Mass.

The quarantine prohibits or restricts the movement of the insect's principal carriers, poplar, willow, and related plants, from these States, or from any districts in them found to be infested with the pest, into other States and Territories.

REQUEST FOR MODIFICATION OF POTATO WART QUARANTINE REFUSED.

WASHINGTON, D. C., *July 5, 1921.*

The honorable the SECRETARY OF STATE.

SIR: I have the honor to acknowledge your letter of June 24, transmitting a note from the British ambassador with additional representations from the department of agriculture and technical instruction for Ireland, relative to potato wart, and renewing the request for a modification of the quarantine which now prohibits the importation into the United States of potatoes from Ireland.

This department is grateful for the information that the danger of importing wart disease with shipments of potatoes is not so great as heretofore supposed. It is recognized that the risk of disease introduction is always a relative matter and has to be considered in connection with the public need for the quarantined commodity and the quantity and character of the offerings from other countries that would be equally affected by the modification of our plant quarantine.

Some plant products are held to be so vitally necessary for American horticulture that a certain risk of introducing plant pests is accepted, an example being apple, pear, and rose stocks, and certain products imported for food purposes only, where the value of the importations is large in proportion to the visible hazard of disease introduction.

Potato wart is, moreover, still viewed as a very serious disease, capable of causing enormous losses to our agriculture, and against which the most stringent measures are justifiable until reassuring new knowledge has been derived from scientific researches now in progress to develop means for its control or eradication.

In contrast with this risk, there is no vital necessity for the importation of potatoes into the United States at the present time. The American crop exceeds the consumptive requirements of our people and a surplus of potatoes is now being thrown away or sold at 25 cents a barrel for starch making.

The principal consideration of this department at the present time, however, is that extensive and thorough investigations of wart, its life history, and the possibility of eradication are now in progress. The results of these investigations are not yet available, and at least until the work of the present season is completed the department does not desire to reopen consideration of the modification of the quarantine.

Respectfully,

HENRY C. WALLACE, *Secretary.*

(A similar letter was addressed to the Holland authorities.)

THE WHITE PINE BLISTER RUST.

NOTICE OF PUBLIC HEARING TO CONSIDER THE ADVISABILITY OF EXTENDING QUARANTINE NO. 26 ON ACCOUNT OF THE WHITE PINE BLISTER RUST TO THE STATE OF WASHINGTON.

The Secretary of Agriculture has information that the white pine blister rust (*Cronartium ribicola*), a dangerous plant disease not heretofore widely prevalent or distributed within and throughout the United States, exists at Sumas City, Mount Vernon, and possibly other points, in the State of Washington.

It appears necessary, therefore, to consider the advisability of extending the Federal domestic quarantine now in effect on account of this disease to the State of Washington, in accordance with the Plant Quarantine Act of

August 20, 1912 (37 Stat., 315), as amended by the act of Congress approved March 4, 1917 (39 Stat., 1134, 1165), prohibiting the movement from that State into other States and Territories, of all five-leafed pines, currant and gooseberry plants.

Notice is, therefore, hereby given that a public hearing will be held at the United States Department of Agriculture, Washington, D. C., room 11, Federal Horticultural Board, at 10 a. m., January 23, 1922, in order that any person interested in the proposed quarantine may appear and be heard, either in person or by attorney.

HEARING ON PINE BLISTER RUST DISCOVERED IN NORTHWEST.

(Press notice.)

WASHINGTON, D. C., *December 21, 1921.*

To protect the white-pine forests of the West against the blister rust, a destructive disease of these trees, the Federal Horticultural Board, United States Department of Agriculture, will hold a public hearing here January 23, 1922, to consider the advisability of extending the present Federal quarantine to include the State of Washington. Any person interested in the proposed action may appear and be heard either in person or by attorney.

The white-pine blister rust was recently found on planted white pine at Vancouver, British Columbia, and on cultivated black currants at several other points in that vicinity. It has apparently extended its range from British Columbia into the northwestern corner of Washington, as it has been found at Sumas City and Mount Vernon. The disease was brought to America during the last 20 years, and has already done much damage. The white-pine forests of the Northeastern States are generally infected, and the disease is spreading in Wisconsin and Minnesota.

The rust passes one stage of its life on five-needle pines (white pine) and another stage on the leaves of currant or gooseberry bushes. Cultivated black currants are especially susceptible to the blister rust, and usually are the first to become diseased, but all kinds of currants are affected. In most sections wild currants and gooseberries are present in great numbers in association with five-needle pines, and as they become infected with the disease transmit it to white pines near by.

Prior to the discovery of the disease in British Columbia and in Washington, the blister rust had been found only in the eastern United States and in the eastern Provinces of Canada. The western pine forests in the United States that are endangered are valued at more than $228,000,000, and are estimated to contain over 57 billion feet of lumber. Much of this timber is located in the national forests. Local control measures have been developed by the United States Department of Agriculture in cooperation with the Northeastern and Lake States which have been practicable under eastern conditions.

MEMORANDUM CONCERNING RIBES DETENTION STATION AT MANDAN, N. DAK.

Prof. L. C. Corbett, Office of Horticultural and Pomological Investigations.
Mr. E. C. Chilcott, Dry-land Agricultural Investigations.
Mr. S. B. Detwiler, Office of Blister Rust Control.

There has recently been arranged an informal understanding between the offices mentioned, concerning the growing of new varieties of currants and gooseberries at Mandan, N. Dak.

Purpose.—Federal Horticultural Board Quarantine No. 26 prohibits the shipment of five-leafed pines, currants and gooseberries from the States east of and including the States of Minnesota, Iowa, Missouri, Arkansas and Louisiana to

States to the west. Inquiries concerning the varieties of currants and gooseberries which are not now known to be growing west of this quarantine line have been received from several sources. It is acknowledged that there is a need for new varieties of these fruits, and some way should be found of supplying the stock, even though it be in small quantities. It is also recognized that there is danger of spreading the white pine blister rust to the western pine forests, if shipments of gooseberries and currants are made to such States as California, Oregon, Idaho, Washington, and others where the five-needled pines are in abundance. Therefore, a detention station situated in the Great Plains region west of the above-mentioned quarantine line and east of the Rocky Mountain States, where new varieties of currants and gooseberries could be brought in under special permit from the East, is advisable. Plants or cuttings may be shipped to this detention station, grown there for a year or more, be carefully inspected for the blister rust at the proper time, and then be shipped out with reasonable certainty of freedom from this disease.

Plan.—The Office of Dry-land Agricultural Investigations agrees to furnish the ground at the Government Experiment Station at Mandan, N. Dak., also the man or men who will superintend the growing and distribution of the stock, and the actual labor required. It is understood that five-leafed pines will not be planted at the station and that no currant or gooseberry plants or cuttings will be shipped without a written certificate from the Office of Blister Rust Control, stating that the plants are free from blister rust, and not under suspicion of being exposed to infection.

The Office of Horticultural and Pomological Investigations agrees to furnish plants or cuttings of new varieties of currants and gooseberries which should be grown west of the quarantine line. This office will cooperate with the Office of Dry-land Agriculture in the distribution of stock. Special permits for cuttings or plants of gooseberries or currants which are being shipped by the Office of Horticultural and Pomological Investigations to the experiment station at Mandan, will be issued by the Federal Horticultural Board. The stock for Mandan should, in all cases possible, be procured from a State free from the blister rust. If stock from a rust-free State is not available, it may be procured from noninfected nurseries in infected States. In all cases, the stock is to be sent to the plant inspection house, Washington, D. C., prior to shipment to Mandan.

The Office of Blister Rust Control agrees to the establishing of such a detention station, with a view to safeguarding of the white-pine forests from the blister rust, and will inspect the stock of currants and gooseberries growing at the station, at least once during the season, in late summer or in the fall.

Approved.

W. A. Taylor,
July 16, 1921. *Chief, Bureau of Plant Industry.*

W. A. Orton.
July 21, 1921. *Acting Chairman, Federal Horticultural Board.*

NOTICE OF PUBLIC HEARING TO CONSIDER THE ADVISABILITY OF RESTRICTING OR PROHIBITING BY QUARANTINE THE MOVEMENT FROM THE UNITED STATES TO THE TERRITORY OF HAWAII OF SUGAR CANE, CORN, COTTON AND ALFALFA PLANTS OR PARTS THEREOF, AND OF THE FRUITS OF AVOCADO AND PAPAYA IN CONNECTION WITH PASSENGERS, BAGGAGE OF PASSENGERS, OR SHIPS' STORES.

Washington, D. C., *February 14, 1921.*

The Secretary of Agriculture has information that injurious insects, including the sugar cane and corn moth borer (*Diatraea saccharalis* Fab.), the avocado weevil (*Heilipus lauri*), the papaya fruit fly (*Toxotrypana curvicauda*),

the alfalfa weevil (*Hypera postica*), and the cotton boll weevil (*Anthonomus grandis*), occur in the United States and that there is danger of their being introduced into the Territory of Hawaii by means of sugar cane, corn, cotton and alfalfa plants or parts thereof, and also the fruits of avocado and papaya carried by passengers or in connection with their baggage and also as ships' stores.

It appears necessary, therefore, to consider the advisability of quarantining the United States in accordance with the Plant Quarantine Act of August 20, 1912 (37 Stat. 315), as amended by the act of Congress approved March 4, 1917 (39 Stat. 1134, 1165), and of restricting or prohibiting the movement from the United States to the Territory of Hawaii of sugar cane, corn, cotton and alfalfa plants or parts thereof, and of the fruits of avocado and papaya in connection with passengers or with the baggage of passengers proceeding from the United States to Hawaii; also as ships' stores. The proposed quarantine and restrictions are not intended to apply to commercial shipments of the articles enumerated, the inspection and necessary restrictions on the movement of which into the Territory of Hawaii are already provided for under territorial laws.

Notice is, therefore, hereby given that a public hearing will be held at the Department of Agriculture, Washington, D. C., room 11, Federal Horticultural Board, at 10 o'clock a. m., April 15, 1921, in order that any person interested in the proposed quarantine may appear and be heard either in person or by attorney.

MAY QUARANTINE UNITED STATES TO KEEP INSECT PESTS FROM HAWAII.

(Press notice.)

WASHINGTON, D. C., *February 15, 1921.*

To protect Hawaii against certain insect pests which are damaging crops in the United States, the Department of Agriculture to-day announced the calling of a hearing to be held in room 11, Federal Horticultural Board, April 15, at 10 o'clock a. m., to consider a quarantine against the carrying of sugar cane, corn, cotton and alfalfa plants or parts thereof, and the fruits of avocado and papaya by passengers or in ships' stores from this country to the territory.

The Secretary of Agriculture has information of existing danger that injurious insects, including the sugar cane and corn moth borer, the avocado weevil, the papaya fruit fly, the alfalfa weevil, and the cotton boll weevil occurring in the United States may be introduced into Hawaii through plants or parts of plants and fruits carried by passengers or as ships' stores.

The proposed quarantine would come under the Plant Quarantine Act of August 20, 1912, as amended. It is not intended to apply to commercial shipments, as necessary restrictions on such movement are provided for under territorial authority. Any person interested in the proposed quarantine may appear at the hearing and be heard either in person or by attorney.

THE MOVEMENT OF SUGAR CANE, CORN, COTTON, ALFALFA, AND FRUITS OF AVOCADO AND PAPAYA FROM THE UNITED STATES TO HAWAII RESTRICTED.

NOTICE OF QUARANTINE NO. 51 (WITH REGULATIONS).

(Effective on and after October 1, 1921.)

The fact has been determined by the Secretary of Agriculture, and notice is hereby given, that there exist in the United States injurious insects, especially the sugar-cane borer (*Diatraea saccharalis* Fab.), the alfalfa weevil (*Hypera postica* Gyll.), the cotton-boll weevil (*Anthonomus grandis* Boh.), the papaya

fruit fly (*Toxotrypana curricauda* Guerst,), and certain insect enemies of the fruit of the avocado, new to and not heretofore widely prevalent or distributed within and throughout the Territory of Hawaii, and that they may be introduced into the Territory of Hawaii by means of sugar-cane, corn, cotton and alfalfa plants or parts thereof, and also the fruits of the avocado and papaya carried by passengers and crews of coastwise ships or vessels, either as baggage or otherwise, and also as ships' stores.

Now, therefore, I, Henry C. Wallace, Secretary of Agriculture, under authority conferred by section 8 of the act of Congress approved August 20, 1912, known as the Plant Quarantine Act (37 Stat., 315), as amended by the act of Congress approved March 4, 1917 (39 Stat., 1134, 1165), do hereby declare that it is necessary, in order to prevent the introduction of the above-mentioned insects, to prohibit the movement from the United States to the Territory of Hawaii by passengers and crews of coastwise ships or vessels, either as baggage or otherwise, or as ships' stores, of sugar-cane, corn (other than shelled corn), cotton and alfalfa plants or parts thereof, and the fruits of the avocado and papaya in the natural or raw state, except in manner or method or under conditions prescribed in the regulations hereinafter made and amendments thereto.

Done in the District of Columbia this 22d day of July, 1921.

Witness my hand and the seal of the United States Department of Agriculture.

[SEAL.] HENRY C. WALLACE,
Secretary of Agriculture.

RULES AND REGULATIONS SUPPLEMENTAL TO NOTICE OF QUARANTINE NO. 51.

REGULATION 1. DEFINITION.—For the purpose of these regulations the term "Plants and plant products" shall be construed to include all the articles enumerated in the quarantine, namely, sugar-cane, corn, cotton and alfalfa plants or parts thereof, and the fruit of the avocado and papaya.

REGULATION 2. COMMERCIAL SHIPMENTS OF PLANTS AND PLANT PRODUCTS UNRESTRICTED BY THIS QUARANTINE.—The restrictions under this quarantine shall not apply to commercial shipments of the plants and plant products enumerated therein.

REGULATION 3. RESTRICTIONS ON MOVEMENT OF PLANTS AND PLANT PRODUCTS AS SHIPS' STORES OR IN POSSSESSION OF CREWS OR PASSENGERS.—The movement to and into the Territory of Hawaii of the plants and plant products covered by the foregoing quarantine No. 51 as ships' stores or by passengers or crews on coastwise ships or vessels en route from the United States is prohibited: *Provided*, That this prohibition shall not restrict the movement and use of such plants and plant products as ships' stores or by passengers or crews, in transit, prior to the arrival of the ships at Hawaii; but, before such ships arrive at the docks at any port within the Territory of Hawaii, any such plants or plant products remaining must be entirely consumed or removed from such ships and such disinfection shall be made as shall be required by an inspector of the United States Department of Agriculture.

REGULATION 4. INSPECTION OF VESSELS.—Inspectors of the United States Department of Agriculture are authorized to enter upon ships or vessels from the United States at any time after they come within the boundaries of the Territory of Hawaii, whether at quarantine off port, in the stream, or at the dock, wharf, or mole, for the purpose of ascertaining by inspection whether any of the fruits, vegetables, or other articles covered by the foregoing quarantine are contained in such ships or vessels either as baggage, ships' stores, or in possession of the crews, or whether there remains any infestation from such fruits, vege-

tables, or other articles; and authority for such inspection shall extend to the personal belongings of passengers and crews.

REGULATION 5. DISINFECTION OF VESSELS AND CONTENTS.—Any ship or vessel found to contain or to be infested from any of the fruits, vegetables, or other articles covered by the foregoing quarantine, and all articles that have been in contact with such fruits, vegetables, or other articles, shall be immediately disinfected before such ship or vessel arrives at the docks at any port within the Territory of Hawaii, and before unloading any of its cargo, in the manner prescribed by an inspector of the United States Department of Agriculture.

When such ship or vessel has been disinfected in a manner satisfactory to such inspector, he shall immediately issue and deliver to the person having charge or possession of such ship or vessel a certificate evidencing such disinfection, which shall permit the unloading of the cargo, so far as the jurisdiction of the Secretary of Agriculture is concerned.

REGULATION 6. POSTING OF WARNING NOTICE AND DISTRIBUTION OF BAGGAGE DECLARATION.—Every person or company owning or controlling any dock, yard, or other harbor in the United States from which ships or vessels sail for ports in the Territory of Hawaii, and every master, captain, or other person in charge or possession of any ship or vessel sailing from the United States destined to a port in the Territory of Hawaii, shall, respectively, post in one or more conspicuous places, and keep posted at all times in one or more conspicuous places, on or in said dock, yard, or other harbor, or in such ship or vessel, and in at least three places—the cabin, the steerage, and crew's quarters in such ship or vessel—a copy of the warning notice printed on the reverse side of the baggage declaration.

Before any ship or vessel from the United States arrives within the boundaries of the Territory of Hawaii the master, captain, or other person having charge or possession of any ship or vessel shall cause to be distributed to each passenger thereon a baggage declaration, to be furnished by the United States Department of Agriculture, calling attention to the provisions of the plant quarantine act, the foregoing quarantine, and these regulations. These baggage declarations, after being signed by the passengers, shall be collected and delivered by the purser to the inspector of the United States Department of Agriculture on arrival at quarantine.

REGULATION 7. IMPORTATIONS BY DEPARTMENT OF AGRICULTURE PERMITTED.—The foregoing quarantine and regulations shall not apply to importations of fruits, vegetables, and other articles enumerated made by the United States Department of Agriculture for experimental or scientific purposes.

The foregoing regulations are hereby adopted, effective on and after October 1, 1921, and shall be in force until further notice.

Done in the District of Columbia this 22d day of July, 1921.

Witness my hand and the seal of the United States Department of Agriculture.

[SEAL.] HENRY C. WALLACE,
Secretary of Agriculture.

QUARANTINE TO PROTECT HAWAII AGAINST PLANT PESTS.

(Press notice.)

WASHINGTON, D. C., *September 3, 1921.*

A Federal quarantine to protect Hawaii against the entry of injurious plant pests, especially the sugarcane borer, the alfalfa weevil, the cotton boll weevil, the papaya fruit fly, and certain insect enemies of the fruit of the avocado, was announced to-day by the Federal Horticultural Board, United States Depart-

ment of Agriculture, to become effective October 1, 1921. As possible carriers of the pests, regulations are provided governing the movement of sugarcane, corn, cotton, alfalfa, and fruits of the avocado and the papaya from the United States to the Territory. These restrictions, however, do not apply to commercial shipments of these plants, such shipments being safeguarded under territorial regulations. As ship's stores or in possesion of crew or passengers they will be under restriction, and Government inspectors will see that they are not brought into the Territory through the various ports.

INSTRUCTIONS TO POSTMASTERS.

CERTIFICATION OF MAIL SHIPMENTS UNDER QUARANTINE NO. 52 (PINK BOLLWORM) REQUIRED.

POST OFFICE DEPARTMENT,
THIRD ASSISTANT POSTMASTER GENERAL,
WASHINGTON, *October 3, 1921.*

POSTMASTER,
——— ———.

MY DEAR SIR: Inclosed for your information is a copy of Quarantine Order No. 52, superseding Quarantine Order No. 46, with regulations issued by the Secretary of Agriculture, quarantining certain areas in the States of Texas, Louisiana and New Mexico, for the pink bollworm infestations, and prohibiting absolutely the movement from the quarantined areas of seed cotton and the stalk and other parts of the cotton plant.

Cotton lint, linters, gin waste and all other forms of cotton lint, cotton seed, cottonseed hulls, cottonseed cake and meal and other articles enumerated by the order may not be moved from the quarantined areas unless inspected, certified, and marked in accordance with the accompanying regulations.

Under the provisions of paragraph 1, section 478, Postal Laws and Regulations, parcels containing any of the articles mentioned above may not be accepted for mailing from any of the areas quarantined in the order unless the articles have been inspected, certified and marked as required.

Sincerely, yours,

W. IRVING GLOVER,
Third Assistant Postmaster General.

[Inc.]

(Above letter was sent to all postmasters in counties situated in either infested or regulated areas in Louisiana, Texas, and New Mexico.)

REVISION OF POINTS FOR TERMINAL INSPECTION IN CALIFORNIA.

POST OFFICE DEPARTMENT,
THIRD ASSISTANT POSTMASTER GENERAL,
WASHINGTON, *October 17, 1921.*

POSTMASTER,
——— ———.

MY DEAR SIR: In connection with previous instructions to postmasters concerning the terminal inspection of plants and plant products in the State of California, there is given below a revised list of the places in that State where such inspection is maintained. In each case the place to which a postmaster in the State of California shall send for inspection after receiving the required postage therefor under the provisions of section 478¼, Postal Laws and Regulations, a package containing plants or plant products subject to terminal inspection, is the one which is nearest to his office.

Alhambra.	Alturas.	Angiola.	Auburn.
Arcadia.	Anaheim.	Aromas.	Azusa.
Artesia.	Anderson.	Arroyo Grande.	Atascadero.

Atherton.
Bell.
Bellflower.
Beverly Hills.
Biggs.
Big Pine.
Burbank.
Bakersfield.
Banning.
Bard.
Beaumont.
Bishop.
Bloomington.
Blythe.
Brawley.
Brynmawr.
Belmont.
Burlingame.
Caliente.
Calipatria.
Charter Oak.
Chatsworth.
Chowchilla.
Clear Water.
Colfax.
Compton.
Culver City.
Calexico.
Carpinteria.
Chico.
Chino.
Claremont.
Coachella.
College City.
Colton.
Colusa.
Corning.
Corona.
Covina.
Craftonville.
Cucamonga.
Cutler.
Calistoga.
Colma.
Cottonwood.
Davis.
Delrosa.
Delano.
Dinuba.
Downey.
Duarte.
Ducor.
Eagle Rock City.
El Monte.
El Segunde.
East Highlands.
Edison.
El Centro.
Elsinore.
Escalon.
Escondido.
Etiwanda.
Eureka.
Exeter.
Fairfield.
Fairmead.
Farmersville.
Fillmore.
Fort Bragg.
Fontana.
Fowler.
Fresno.
Gardena.
Gilroy.
Gridley.
Glendale.
Glendora.
Goshen.
Grass Valley.
Gustine.
Harbor City.
Hermosa Beach.
Hollywood.
Holtville.
Hueneme.
Huntington Park.
Hynes.
Hanford.
Healdsburg.
Hemet.
Highland.
Hollister.
Hopland.
Half Moon Bay.
Independence.
Inglewood.
Inyokern.
Irwindale.
Imperial.
Indio.
Jamestown.
Kern.
Kelseyville.
King City.
Lakeport.
Lankershim.
La Verne.
Lincoln.
Lomita.
Long Beach.
Loomis.
Los Molinos.
Lancaster.
Lemon Cove.
Lindsay.
Livingston.
Lodi.
Los Angeles.
Manhattan.
Mojave.
Montaloo.
Montebello.
Moorpark.
McFarland.
Madeline.
Madera.
Manteca.
Martinez.
Marysville.
Merced.
Modesto.
Monrovia.
Menlo Park.
Millbrae.
Monterey.
New Hall.
Newman.
No. Pomona.
Napa.
Norwalk.
Ocean Park.
Ojai.
Orland.
Owensmouth.
Oakdale.
Oakland.
Oakley.
Oceanside.
Ontario.
Orange.
Orosi.
Oroville.
Oxnard.
Pacoima.
Palmdale.
Palms.
Paradise.
Penryn.
Piru.
Puente.
Pasadena.
Paso Robles.
Perris.
Pixley.
Placerville.
Point Arena.
Pomona.
Portersville.
Patterson.
Redondo Beach.
Rivera.
Roseville.
Red Bluff.
Redding.
Redlands.
Rialto.
Richgrove.
Ripon.
Riverside.
Redwood City.
San Gabriel.
San Pedro.
Santa Fe Springs.
Santa Monica.
Santa Susana.
Saticoy.
Saugus.
Sawtelle.
Shafter.
Sherman.
Sierra Madre.
Simi.
Spado.
Sacramento.
San Benito.
San Bernardino.
San Diego.
San Dimas.
San Fernando.
San Francisco.
San José.
San Luis Obispo.
San Mateo.
Santa Ana.
Santa Barbara.
Santa Cruz.
Santa Maria.
Santa Paula.
Santa Rosa.
South Pasadena.
Springville.
Stockton.
Saint Helena.
Strathmore.
Sultana.
Susanville.
Salinas.
San Bruno.
San Rafael.
Sonora.
Topanga.
Torrance.
Turlock.
Tehachapi.
Terra Bella.
Tipton.
Tropico.
Tulare.
Ukiah.
Upland.
Vacaville.
Vallejo.
Van Nuys.
Venice.
Ventura.
Victorville.
Visalia.
Walnut.
Waterford.
Watts.
Willowbrook.
Wasco.
Watsonville.
Whittier.
Williams.
Willow.
Winters.
Woodlake.
Woodland.
Yettem.
Yreka.
Yucaipa.
Yuba City.
Zelzah.

Sincerely, yours,

W. Irving Glover,
Third Assistant Postmaster General.

REVISION OF POINTS FOR TERMINAL INSPECTION IN MISSISSIPPI.

POST OFFICE DEPARTMENT,
THIRD ASSISTANT POSTMASTER GENERAL,
Washington, October 21, 1921.

POSTMASTER,
———— ————.

MY DEAR SIR: In connection with previous instructions of this office appearing in Article 30 on page 10 of the November, 1920, Supplement to the Postal Guide, relating to the terminal inspection of plants and plant products subject thereto when addressed to places in Mississippi, you are informed that provision has been made for the maintenance of facilities for such inspection at the additional places in Mississippi named below:

Meridian. Leland.

Therefore, you will hereafter, upon receiving the required postage, as prescribed by paragraph 3, section 478¼, Postal Laws and Regulations, send to the inspection point which is nearest to your office, parcels addressed for delivery at your office containing plants or plant products which are subject to terminal inspection.

Ocean Springs should be removed from the list as terminal inpection is no longer maintained thereat.

Sincerely, yours,

W. IRVING GLOVER,
Third Assistant Postmaster General.

[Revised January 1, 1922.]

EXPLANATION OF PROVISIONS FOR ENTRY OF PLANT NOVELTIES AND PROPAGATING STOCK UNDER REGULATION 14, QUARANTINE 37.

Before taking up the specific subject of this circular, namely, plant entry under regulation 14, quarantine 37, it seems desirable to indicate briefly the necessity for quarantine 37 and the various provisions under it for the entry of plants.

NECESSITY FOR QUARANTINE 37.

Nursery stock and other plants and seeds imported for propagation have been the source of the introduction of some 90 per cent of the insect pests and plant diseases that have come to us from other countries and now occasion losses to our agriculture and forestry of approximately $1,000,000,000 annually. Such material comes in a living condition, often with the roots embedded in earth, and is promptly taken to the field or greenhouse where other plants are growing, thus furnishing the best possible conditions for the local establishment of any insect pests or plant diseases which it may harbor. A practical test over a seven-year period of the possibility of safeguarding plant imports by inspection and disinfection has plainly indicated the inadequacy of this method and the conclusion is forced that the only possible means of effectively lessening the introduction of new plant pests is the policy of exclusion of all plant stock not absolutely essential to the agricultural and forestry needs of the United States. Carrying out this policy, quarantine 37 restricts the entry of nursery stock and most other plants and seeds, permitting unlimited entry of certain classes only of plants which it is believed can not at present be adequately produced in the United States. Provisions are made, however, in the regulations under this quarantine for the entry of any plant whatsoever for which a reasonable need can be shown, either for introduction of new varieties or for propagating stock not available in the United States, or for any experimental or scientific purpose. Briefly, these provisions are as follows:

PROVISIONS MADE FOR THE ENTRY OF ANY NECESSARY PLANTS.

Under regulation 2 of the quarantine unlimited entry is possible, without permit or other restriction, of field, vegetable, and flower seeds, and of fruits, vegetables, cereals, and other plant products imported for medicinal, food, or manufacturing purposes.

Regulation 3 provides for the unlimited entry, under permit and with provision for inspection, and, if necessary, disinfection, of certain important classes of plants and plant products which can not at present be adequately produced in the United States.

Regulation 14 makes provision for the entry, under special permit, of any plant or seed not included under regulations 2 and 3 for the purpose of keeping the country supplied with new varieties and necessary propagating stock as a basis for reproduction plantings which will ultimately make the United States independent of foreign supplies.

Regulation 15 recognizes the intimate trade relations between the United States and Canada and Mexico, and provides, under permit and necessary safeguards, for the importation of otherwise prohibited stock from foreign countries contiguous to the United States.

The only exceptions to entry of plants thus provided for are those involved under specific quarantines, as, for example, the prohibition of entry of Ribes and Grossularia from certain countries, and generally of citrus, bamboo, banana plants, etc., but any of the plants prohibited under such quarantines may be imported, under permit and adequate safeguards, by or through the United States Department of Agriculture for any necessary experimental, scientific, or introduction purposes.

ENTRY OF PLANTS UNDER REGULATION 14.

As already indicated, the object of regulation 14 is to make it possible to keep the country supplied with "new varieties" and "necessary propagating stock." These terms are described in regulation 1 under quarantine 37 as follows:

New varieties.—A new variety is understood to mean a novelty, i. e., a new plant, variety, strain, type, or form, either recognized by the trade as such or so listed or described in catalogs, trade journals, or other publications, or duly and properly certified as such by the originator or introducer.

Necessary propagating stock.—Stock of old or standard varieties not available in this country and imported for the multiplication of the plants in question as a nursery or florist enterprise as distinguished from importations for the immediate or ultimate sale of the stocks actually imported.

The expression "*limited quantities*" used in regulation 14 is understood to mean, with respect both to new varieties and necessary propagating stocks, such quantities as will supply reasonable needs for the establishment of reproduction plantings.

Inasmuch as the purpose of regulation 14 is to make possible the home production of any new plants and of any old varieties of plants not commercially available in the United States, the immediate sale of plants thus imported is not permitted, but these plants must be kept and utilized for the purpose of reproducing additional stocks for periods of from one to five years designated in the bond, the period being based on the time needed for multiplication or reproduction. No restrictions are placed on the sale of plants produced from imported stock, except that the importer will be expected to maintain a sufficient supply to meet his needs.

It is expected, therefore, that importations under regulation 14 will be by persons who will propagate the imported stock as a commercial enterprise. The only exceptions will be the issuance of permits to provide for the needs of botanic gardens, agricultural colleges, experiment stations, and other similar public institutions, and to those few amateurs who are widely or nationally known as maintaining collections of real merit or engaged in work of public benefit with the plants concerned. If such persons are not known to the experts of this Department, they will be required to furnish evidence of their status. Permits will not be issued to anyone for the importation of plants for personal use, such as for the mere adornment of private estates.

There is no limitation under regulation 14 as to the number of permits for different plants or classes of plants which an individual may request, but, prior to the issuance of the permits, the varieties applied for will all be passed upon by experts of the Bureau of Plant Industry of the Department, for the information of the Board both as to necessity for the particular importation and as to the quantity adequate for the purpose intended. Plants thus imported will be restricted to the smallest plants as to size and age or to the portions of plants that can accomplish the purpose.

The bond required by the Department of Agriculture in connection with such special permits was found necessary to prevent the immediate sale by some importers of plants obtained for propagation under such permits. It is of the type of bond long used in the customs service for similar purposes and has not proved a serious bar to plant importations. It is not required of botanic gardens, State experiment stations, agricultural colleges, and other similar public institutions. Such bond may be either issued by an approved sureties company or it may be certified by personal bondsmen acceptable to the Department.

For the purpose of enforcing conditions of entry, inspection, and otherwise safeguarding the shipments, all importations under regulation 14 must be made through the Federal Horticultural Board of the Department of Agriculture but for the use of the individual importer.

PROCEDURE FOR MAKING IMPORTATIONS UNDER REGULATION 14.

Application blank.—The Federal Horticultural Board will supply, on request, a form of application for special permit to import nursery stock and other plants and seeds under the provisions of regulation 14. This application, under "Conditions of entry," explains the bonding requirements and also the conditions of packing, inspection, and clearance through the customhouse. It also embodies various agreements which must be subscribed to by the importer to safeguard the importation. The application must be filled out as to all the informational data called for and must be signed by the applicant, and forwarded to the Federal Horticultural Board. The applicant should also indicate whether the importation is intended for commercial propagation or for a public institution, or is requested by an amateur as defined in a preceding paragraph.

Permit and shipping tags.—If the permit is issued, the applicant will be furnished with a blank form of bond to be executed and returned to the Board, and also with shipping instructions and shipping tags to be forwarded with his order to the exporter. With the exception of transpacific shipments for western destinations, such shipping tags will be addressed to the United States Department of Agriculture, Federal Horticultural Board, Washington, D. C., but will be indorsed with the permit number and name of the importer. Transpacific shipments for all western points entering through the port of San Francisco may be given inspection and clearance at that port in the same manner as at Washington.

Delivery to Board in bond.—Material coming to Washington must be turned over to the Federal Horticultural Board by the importer or his authorized agent, and in the specially equipped inspection houses and under expert care as to the welfare of the plants, it will be carefully examined by the Board's inspectors. If the shipment is found to comply with the conditions of entry and to be free from dangerous insects or diseases, it will be immediately repacked and forwarded, charges collect, to the importer.

Shipments for clearance at San Francisco will be similarly handled by the agents of the Board—Ferry Building, San Francisco.

Disinfection.—Disinfection will be authorized for slight infestation, but should the material be found to be so infected or infested with either diseases or insects that it can not be adequately disinfected, it will either be destroyed, or, when desired, permission may be granted for its exportation.

Storage and repacking.—So far as possible the Board will undertake to provide for storage and repacking. Should importers request, however, permits covering the importation of larger quantities of propagating or other stock under regulation 14 than can be housed and cared for in the inspection houses of this Department, and should such request be approved, the importers may be required to provide local storage in Washington for such material during the period of detention for examination and, if necessary, disinfection, including opening of containers and repacking.

Charges.—The Department will make no charge for inspection and supervision, but the importer will be required to meet all entry, transportation, disinfection, and handling charges, drayage, etc., and for this purpose should make arrangements with responsible agencies at port of arrival for forwarding in bond to Washington, D. C., and in Washington for all local charges as indicated.

Mail shipments.—Permission for importation through the mails of special permit material under regulation 14 will hereafter be authorized on request when warranted by the nature and amount of the proposed shipment. Such authority, if approved, will be indicated on the permit, and tags for such mail shipments will be furnished. These tags will be addressed to the United States Department of Agriculture, Federal Horticultural Board, either Washington, D. C., or Ferry Building, San Francisco, Calif., and will carry the number of the permit authorizing the importation, and when attached to the package will authorize the foreign postmaster to accept it for shipment. By special arrangement with the United States Post Office Department, such mail shipments, after inspection, may be forwarded to the importer without payment of additional postage. The entry requirements in the case of mail shipments are somewhat simplified. By arrangement with the customs service such shipments are permitted to come in bond directly to the Department of Agriculture either at the Washington or San Francisco offices of the Board, obviating any brokerage service for forwarding from port of first arrival. The importer will have to provide merely for customs clearance either at Washington or San Francisco.

It should be distinctly understood that mail shipment of plants and seeds for propagation is strictly limited to special permit material under regulation 14, and to field, vegetable, and flower seeds under regulation 2, and is prohibited as to commercial or other entry under regulations 3 and 15 of quarantine 37.[1]

C. L. Marlatt,
Chairman of Board.

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[1] See U. S. Official Postal Guide, July, 1921, p. 138, section 180.

MAIL ENTRY OF IMPORTS UNDER REGULATION 14, QUARANTINE 37, HEREAFTER PERMITTED.

JANUARY 1, 1922.

The importation by mail of plants and seeds for propagation, except field, vegetable, and flower seeds, and importations made by the Department of Agriculture, is prohibited. (See U. S. Official Postal Guide, July, 1921, page 138, section 180.) Inasmuch as importations made by special permit under Regulation 14, Quarantine 37, must necessarily be addressed to the Federal Horticultural Board either at Washington, D. C., or at the Ferry Building, San Francisco, Calif., and pass through the inspection offices of the Board at these points and be inspected and safeguarded by the agents of the Board, it is believed to be safe and desirable to extend the privilege of importation through the mails to such shipments.

In accordance with this decision, permission for the importation through the mails of special permit material under regulation 14 will hereafter be authorized on request, when warranted by the nature and amount of the proposed shipment. Such authority, if approved, will be indicated on the permit, and tags for such mail shipments will be furnished. These tags will be addressed to the United States Department of Agriculture, Federal Horticultural Board, either Washington, D. C., or Ferry Building, San Francisco, Calif., and will carry the number of the permit authorizing the importation, and when attached to the package will authorize the foreign postmaster to accept it for shipment. By special arrangement with the United States Post Office Department, such mail shipments, after inspection, may be forwarded to the importer without payment of additional postage. The entry requirements in the case of mail shipments are somewhat simplified. By arrangement with the customs service such shipments are permitted to come in bond directly to the Department of Agriculture either at the Washington or San Francisco offices of the Board, obviating any brokerage service for forwarding from port of first arrival. The importer will have to provide merely for customs clearance either at Washington or San Francisco.

It should be distinctly understood that mail shipment of plants and seeds for propagation is strictly limited to special permit material under regulation 14, and to field, vegetable, and flower seeds under regulation 2, and is prohibited as to commercial or other entry under regulations 3 and 15 of quarantine 37.

C. L. MARLATT, *Chairman of Board.*

TREASURY DECISIONS.

(T. D. 38811.)

QUARANTINE—INDIAN CORN.

TREASURY DEPARTMENT, *August 5, 1921.*

To collectors of customs at Canadian border ports:

Your attention is invited to Notice of Quarantine No. 41 with regulations issued by the Secretary of Agriculture, effective July 21, 1921, copies of which were recently mailed to all headquarters ports on the Canadian border governing the importation of Indian corn or maize and related plants from Canada.

Additional copies of this publication may be secured upon application to the Secretary of Agriculture.

EDWARD CLIFFORD, *Assistant Secretary.*

(T. D. 38812.)

QUARANTINE—NURSERY STOCK PLANTS, AND SEEDS.

TREASURY DEPARTMENT, *August 5, 1921.*

To collectors of customs:

Your attention is invited to the revised edition of Notice of Quarantine No. 37 and regulations thereunder issued by the Secretary of Agriculture

effective on and after August 1, 1921, copies of which were recently mailed to all headquarters ports, prohibiting the importation of nursery stock, plants, and seeds, except as provided in the regulations.

Additional copies of this publication may be secured upon application to the Secretary of Agriculture.

EDWARD CLIFFORD, *Assistant Secretary.*

CONVICTIONS FOR VIOLATIONS OF THE PLANT QUARANTINE ACT.

The following convictions for violations of the plant quarantine act were reported to the board during the period July 1 to December 31, 1921:

White-pine blister-rust quarantine.—In the case of the United States *v.* Harrisons' Nurseries, Berlin, Md., in the interstate shipment of one package of currant bushes to a point outside of the quarantined area, the defendants pleaded guilty and were fined $5 and costs. (Plant Quarantine Case No. 120.)

In the case of the United States *v.* Hardy Field Nursery & Seed Co., Kansas City, Mo., in the interstate shipment of currant and gooseberry plants to points outside of the quarantined area, the defendant pleaded guilty and was fined $5 and costs on each of eight counts. (Plant Quarantine Case No. 66.)

In the case of the United States *v.* Iowa Seed Co., 209–211 Walnut Street, Des Moines, Iowa, in the interstate shipment of gooseberry plants to a point outside of the quarantined area, the defendant pleaded guilty and was fined $10 and costs. (Plant Quarantine Case No. 75.)

In the case of the United States *v.* Maloney Bros. & Wells Co., Dansville, N. Y., in the interstate shipment of approximately 200 currant and gooseberry plants to a point outside of the quarantined area, the defendant withdrew former plea of not guilty and pleaded guilty and was fined $50. (Plant Quarantine Case No. 77.)

In the case of the United States *v.* L. J. Farmer, Pulaski, N. Y., in the interstate shipment of approximately 16 currant and 5 gooseberry plants to points outside of the quarantined area, the defendant pleaded guilty and was fined $100. (Plant Quarantine Case No. 69.)

In the case of the United States *v.* J. G. Prestage, Proprietor, Allegan Nursery, Allegan, Mich., in the interstate shipment of 4 white pines to a point outside of the quarantined area, the defendant withdrew former plea of not guilty and pleaded guilty and was fined $25. (Plant Quarantine Case No. 68.)

In the case of the United States *v.* Earl Ferris, doing business as the Earl Ferris Nursery Co., Hampton, Iowa, in the interstate shipment of 31 white pines to points outside of the quarantined area, the defendant pleaded guilty to four counts and was fined $5 on each count, a total of $20, and costs. (Plant Quarantine Case No. 88.)

In the case of the United States *v.* T. S. Hubbard Co., Fredonia, N. Y., in the interstate shipment of two packages containing currant plants to points outside of the quarantined area, the defendant pleaded guilty and was fined $10. (Plant Quarantine Case No. 104.)

In the case of the United States *v.* Pomona Nurseries (Inc.), Dansville, N. Y., in the interstate shipment of one currant and two gooseberry plants to a point outside of the quarantined area, the defendant pleaded guilty and was fined $10. (Plant Quarantine Case No. 117.)

In the case of the United States *v.* Owatonna Nursery Co., Owatonna, Minn., in the interstate shipment of currant and gooseberry plants to points outside of the quarantined area, the defendant pleaded guilty and was fined $5. (Plant Quarantine Case No. 100.)

In the case of the United States *v.* Jewell Nursey Co., Lake City, Minn., in the interstate shipment of 12 currant and 6 gooseberry plants to a point outside of the quarantined area, the defendant pleaded guilty and was fined $5. (Plant Quarantine Case No. 84.)

Avocado or *alligator pear quarantine.*—In the case of the United States *v.* Romulo Arechiga, 902 Laredo Street, Laredo, Tex., for the smuggling into this country from Mexico of three avocados, the defendant pleaded guilty and was sentenced to one hour in the custody of the marshal. (Plant Quarantine Case No. 83.)

In the case of the United States *v.* L. R. Ortiz, Laredo, Tex., for the smuggling into this country from Mexico of five avocados, the defendant pleaded guilty and was fined $5. (Plant Quarantine Case No. 80.)

LIST OF CURRENT QUARANTINE AND OTHER RESTRICTIVE ORDERS.

QUARANTINE ORDERS.

The numbers assigned to these quarantines indicate merely the chronological order of issuance of both domestic and foreign quarantines in one numerical series. The quarantine numbers missing in this list are quarantines which have either been superseded or revoked. For convenience of reference these quarantines are here classified as domestic and foreign.

DOMESTIC QUARANTINES.

Date palms.—Quarantine No. 6: Regulates the interstate movement of date palms or date-palm offshoots from Riverside County, Calif., east of the San Bernardino meridian; Imperial County, Calif.; Yuma, Maricopa, and Pinal Counties, Ariz.; and Webb County, Tex.; on account of the Parlatoria scale (*Parlatoria blanchardi*) and the Phoenicococcus scale (*Phoenicococcus marlatti*),

Hawaiian fruits.—Quarantine No. 13, revised: Prohibits or regulates the importation from Hawaii of all fruits and vegetables, in the natural or raw state, on account of the Mediterranean fruit fly and the melon fly.

Sugar cane.—Quarantine No. 16: Prohibits the importation from Hawaii and Porto Rico of living canes of sugar cane, or cuttings or parts thereof, on account of certain injurious insects and fungous diseases.

Five-leafed pines, Ribes and Grossularia.—Quarantine No. 26, as amended: Prohibits the interstate movement of five-leafed pines, currant and gooseberry plants from all States east of and including the States of Minnesota, Iowa, Missouri, Arkansas, and Louisiana to points outside of this area; prohibits, further, (1) the interstate movement of five-leafed pines and black-currant plants to points outside the area comprising the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, and New York, and (2) to protect the State of New York, the movement from the New England States, on account of the white-pine blister rust.

Sweet potato and yam.—Quarantine No. 30: Prohibits the movement from the Territories of Hawaii and Porto Rico into or through any other Territory, State or District of the United States of all varieties of sweet potatoes and yams (*Ipomoea batatas and Dioscorea* spp.), regardless of the use for which the same are intended, on account of the sweet-potato weevil (*Cylas formicarius*) and the sweet-potato scarabee (*Euscepes batatæ*).

Banana plants.—Quarantine No. 32: Prohibits the movement from the Territories of Hawaii and Porto Rico into or through any other Territory, State, or District of the United States of any species or variety of banana plants (*Musa* spp.), regardless of the use for which the same are intended, on account of two injurious weevils, *Rhabdocnemis obscurus* and *Metamasius hemipterus*.

Black stem rust.—Quarantine No. 38: Prohibits the movement interstate to any point outside of the quarantined area of the common barberry and its horticultural varieties, as well as certain other species of Berberis and Mahonia, on account of the black stem rust of wheat, oats, barley, rye, and many wild and cultivated grasses.

European corn borer.—Quarantine No. 43, revised: Regulates the movement interstate to any point outside of the quarantined area of corn and broom corn (including all parts of the stalk), celery, green beans in the pod, beets with tops, spinach, rhubarb, oat and rye straw as such or when used as packing, cut flowers or entire plants of chrysanthemum, aster, cosmos, zinnia, hollyhock, and cut flowers or entire plants of gladiolus and dahlia, except the bulbs thereof, without stems, on account of the European corn borer (*Pyrausta nubilalis*).

Gypsy moth and brown-tail moth.—Quarantine No. 45, as amended: Regulates the movement interstate to any point outside of the quarantined towns and territory, or from points in the generally infested area to points in the lightly infested area, of stone or quarry products, and of the plants and the plant products listed therein. The quarantine covers all the New England States.

Hawaiian and Porto Rican cotton, cotton seed and cottonseed products.—Quarantine No. 47: Regulates the movement of cotton, cottonseed, and cottonseed products from Hawaii and Porto Rico on account of the pink bollworm and the cotton blister mite, respectively.

Japanese beetle.—Quarantine No. 48, revised: Regulates the movement interstate to any point outside of certain portions of the counties of Burlington and Camden, N. J., and certain portions of the counties of Philadelphia and Bucks, Pa., of (1) farm, garden, and orchard products of all kinds; (2) grain and forage crops of all kinds; (3) nursery, ornamental, and greenhouse stock and all other plants, including bulbs and cut flowers, and (4) soil, compost and manure other than fresh manure, on account of the Japanese beetle (*Popillia japonica*).

United States quarantined to protect Hawaii.—Quarantine No. 51: Regulates the movement from the United States to the Territory of Hawaii, as ships' stores or as baggage or effects of passengers or crews, of sugar cane, corn, cotton, alfalfa, and the fruits of the avocado and papaya.

Pink bollworm.—Quarantine No. 52, as amended: Prohibits the interstate movement from the infested and regulated areas of Texas, Louisiana, and New Mexico of cotton, including all parts of the plant, seed cotton, cotton lint, linters, gin waste and all other forms of cotton lint, cotton seed, cottonseed hulls, cottonseed cake and meal, bagging and other containers of the articles enumerated, and also railway cars, boats, and other vehicles which have been used in conveying cotton and cotton products grown in the infested districts or which are fouled with such products, hay and other farm products, farm household goods ,and farm equipment, except as provided in the rules and regulations supplemental thereto, on account of the pink bollworm of cotton (*Pectinophora gossypiella* Saunders).

Satin moth.—Quarantine No. 53: Prohibits the interstate movement to points outside of the infested areas in New Hampshire and Massachusetts of all species or varieties of poplar and willow, on account of the satin moth.

FOREIGN QUARANTINES.

Irish potatoes.—Quarantine No. 3: Prohibits the importation of the common or Irish potato from Newfoundland; the islands of St. Pierre and Miquelon; Great Britain, including England, Scotland, Wales, and Ireland; Germany; and Austria-Hungary, on account of the disease known as potato wart.

Mexican fruits.—Quarantine No. 5, as amended: Prohibits the importation of oranges, sweet limes, grapefruit, mangoes, achras sapotes, peaches, guavas, and plums from the Republic of Mexico, on account of the Mexican fruit fly.

Five-leafed pines, Ribes and Grossularia.—Quarantine No. 7, as amended: Prohibits the importation from each and every country of Europe and Asia, and from the Dominion of Canada and Newfoundland, of all five-leafed pines and all species and varieties of the genera *Ribes* and *Grossularia*, on account of the white-pine blister rust.

Cotton seed and cottonseed hulls.—Quarantine No. 8, as amended: Prohibits the importation from any foreign locality and country, excepting only the locality of the Imperial Valley, in the State of Lower California, Mexico, of cotton seed (including seed cotton) of all species and varieties, and cottonseed hulls, on account of the pink bollworm. Cotton and cotton seed from the Imperial Valley may be entered under permit and regulation.

Seeds of avocado or alligator pear.—Quarantine No. 12: Prohibits the importation from Mexico and the countries of Central America of the seeds of the avocado or alligator pear, on account of the avocado weevil.

Sugar cane.—Quarantine No. 15: Prohibits the importation from all foreign countries of living canes of sugar cane, or cuttings or parts thereof, on account of certain injurious insects and fungous diseases. There are no restrictions on the entry of such materials into Hawaii and Porto Rico.

Citrus nursery stock.—Quarantine No. 19: Prohibits the importation from all foreign localities and countries of all citrus nursery stock, including buds, scions, and seeds, on account of the citrus canker and other dangerous citrus diseases. The term "citrus," as used in this quarantine, includes all plants belonging to the subfamily or tribe *Citratae*.

European pines.—Quarantine No. 20: Prohibits, on account of the European pine-shoot moth (*Evetria buoliana*), the importation from all European countries and localities of all pines not already excluded by Quarantine No. 7.

Indian corn or maize and related plants.—Quarantine No. 24, as amended: Prohibits the importation from southeastern Asia (including India, Siam, Indo-China, and China), Malayan Archipelago, Australia, New Zealand, Oceania, Philippine Islands, Formosa, Japan and adajcent islands, in the raw or unmanu-

factured state, of seed and all other portions of Indian corn or maize (*Zea mays* L.), and the closely related plants, including all species of Teosinte (*Euchlaena*), Job's tears (*Coix*), *Polytoca*, *Chionachne*, and *Sclerachne*, on account of the downy mildews and *Physoderma* diseases of Indian corn, except that Indian corn or maize may be imported under permit and upon compliance with the conditions prescribed in the regulations of the Secretary of Agriculture.

Citrus fruit.—Quarantine No. 28: Prohibits the importation from eastern and southeastern Asia (including India, Siam, Indo-China, and China), the Malayan Archipelago, the Philippine Islands, Oceania (except Australia, Tasmania, and New Zealand), Japan (including Formosa and other islands adjacent to Japan), and the Union of South Africa, of all species and varieties of citrus fruits, on account of the citrus canker, except that oranges of the mandarin class (including satsuma and tangerine varieties) may be imported under permit and upon compliance with the conditions prescribed in the regulations of the Secretary of Agriculture.

Sweet potato and yam.—Quarantine No. 29: Prohibits the importation for any purpose of any variety of sweet potatoes or yams (*Ipomoea batatas* and *Dioscorea* spp.) from all foreign countries and localities, on account of the sweet-potato weevils (*Cylas* spp.) and the sweet-potato scarabee (*Euscepes batatae*).

Banana plants.—Quarantine No. 31: Prohibits the importation for any purpose of any species or variety of banana plants (*Musa* spp.), or portions thereof, from all foreign countries and localities, on account of the banana-root borer (*Cosmopolites sordidus*). No restrictions are placed on the importation of the fruit of the banana.

Bamboo.—Quarantine No. 34. Prohibits the importation for any purpose of any variety of bamboo seed, plants, or cuttings thereof capable of propagation, including all genera and species of the tribe *Bambuseae*, from all foreign countries and localities, on account of dangerous plant diseases, including the bamboo smut (*Ustilago shiraiana*). This quarantine order does not apply to bamboo timber consisting of the mature dried culms or canes which are imported for fishing rods, furniture making, or other purposes, or to any kind of article manufactured from bamboo or to bamboo shoots cooked or otherwise preserved.

Nursery stock, plants, and seeds.—Quarantine No. 37, with regulations, revised: Prohibits the importation of nursery stock and other plants and seeds from all foreign countries and localities, on account of certain injurious insects and fungous diseases, except as provided in the regulations. Under this quarantine the following plants and plant products may be imported without restriction: Fruits, vegetables, cereals, and other plant products imported for medicinal, food, or manufacturing purposes, and field, vegetable, and flower seeds. The entry of the following plants is permitted under permit: Lily bulbs, lily of the valley, narcissus, hyacinths, tulips, and crocus; stocks, cuttings, scions, and buds of fruits; rose stocks, including manetti, multiflora, brier rose, and rosa rugosa; nuts, including palm seeds, seeds of fruit, forest, ornamental, and shade trees; seeds of deciduous and evergreen ornamental shrubs, and seeds of hardy perennial plants.

Provision is also made for the issuance of special permits under safeguards to be prescribed in such permits for the entry in limited quantities of nursery stock and other plants and seeds not covered in the preceding lists for the purpose of keeping the country supplied with new varieties and necessary propagating stock.

Flag smut and take-all.—Quarantine No. 39, with regulations: Prohibits the importation of seed or paddy rice from Australia, India, Japan, Italy, France, Germany, Belgium, Great Britain, Ireland, and Brazil on account of two dangerous plant diseases known as flag smut (*Urocystis tritici*) and take-all (*Ophiobolus graminis*). Wheat, oats, barley, and rye may be imported from the countries named only under permit and upon compliance with the conditions prescribed in the regulations of the Secretary of Agriculture.

European corn borer.—Quarantine No. 41, with regulations, revised: Prohibits the importation of the stalk and all other parts, whether used for packing or other purposes, in the raw or unmanufactured state, of Indian corn or maize, broom corn, sweet sorghums, grain sorghums, Sudan grass, Johnson grass, sugar cane, pearl millet, napier grass, teosinte and Job's tears, from all foreign countries and localities, except as provided in the rules and regulations supplemental thereto, on account of the European corn borer (*Pyrausta nubilalis*) and other dangerous insects and plant diseases.

Mexican corn.—Quarantine No. 42, with regulations: Prohibits the importation of Indian corn or maize from Mexico, except as provided in the rules and regulations supplemental thereto, on account of the contamination of such corn with cotton seed more or less infested with the pink bollworm.

Stocks, cuttings, scions, and buds of fruits.—Quarantine No. 44: Prohibits the importation of stocks, cuttings, scions, and buds of fruits from Asia, Japan, Philippine Islands, and Oceania (including Australia and New Zealand) on account of dangerous plant diseases, including Japanese apple cankers, blister blight, and rusts, and injurious insect pests, including the oriental fruit moth, the pear fruit borer, the apple moth, etc.

Citrus black fly.—Quarantine No. 49, with regulations: Prohibits the importation of fruits and vegetables, and of plants or portions of plants used as packing material in connection with shipments of such fruits and vegetables, or otherwise, from Cuba, the Bahamas, Jamaica, Canal Zone, Costa Rica, India, Philippine Islands, Ceylon, and Java, except as provided in the rules and regulations supplemental thereto, on account of the citrus black fly (*Aleurocanthus woglumi*).

OTHER RESTRICTIVE ORDERS.

The regulation of the entry of nursery stock from foreign countries into the United States was specificially provided for in the plant-quarantine act. The act further provides for the similar regulation of any other class of plants or plant products when the need therefor shall be determined. The entry of the plants and plant products listed below has been brought under such regulation:

Nursery stock.—The conditions governing the entry of nursery stock and other plants and seeds from all foreign countries and localities are indicated above under "Foreign Quarantines." (See Quarantine No. 37, Revised.)

Irish potatoes.—The importation of Irish potatoes is prohibited altogether from the countries enumerated in the potato quarantine. Potatoes may be admitted from other foreign countries under permit and in accordance with the provisions of the regulations issued under the order of December 22, 1913, bringing the entry of potatoes under restriction on account of injurious potato diseases and insect pests. Importation of potatoes is now authorized from the following countries: Denmark, Cuba, Bermuda, and the Dominion of Canada. The regulations issued under this order have been amended so as to permit, free of any restrictions whatsoever under the plant-quarantine act, the importation of potatoes from any foreign country into the Territories of Porto Rico and Hawaii for local use only and from the Dominion of Canada and Bermuda into the United States or any of its Territories or Districts.

Avocado, or alligator pear.—The order of February 27, 1914, prohibits the importation from Mexico and the countries of Central America of the fruits of the avocado, or alligator pear, except under permit and in accordance with the other provisions of the regulations issued under said order, on account of the avocado weevil. Entry is permitted through the port of New York only and is limited to the large, thick-skinned variety of the avocado. The importation of the small, purple, thin-skinned variety of the fruit of the avocado and of avocado nursery stock under 18 months of age, is prohibited.

Cotton.—The order of April 27, 1915, prohibits the importation of cotton from all foreign countries and localities, except under permit and in accordance with the other provisions of the regulations issued under said order, on account of injurious insects, including the pink bollworm. These regulations apply in part to cotton grown in and imported from the Imperial Valley, in the State of Lower California, in Mexico.

Corn.—The order of March 1, 1917 (Amendment No. 1, with regulations to Notice of Quarantine No. 24), prohibits the importation of Indian corn or maize in the raw or unmanufactured state from the countries and localities listed in Notice of Quarantine No. 24, except under permit and in accordance with the other provisions of the regulations issued under said order, on account of injurious diseases of Indian corn.

Cottonseed products.—The order of June 23, 1917, prohibits the importation of cottonseed cake, meal, and all other cottonseed products, except oil, from all foreign countries, and a second order of June 23, 1917, prohibits the importation of cottonseed oil from Mexico, except under permit and in accordance with the other provisions of the regulations issued under said orders, on account of injurious insects, including the pink bollworm.

Citrus fruits.—The order of June 27, 1917 (Notice of Quarantine No. 28, with regulations), prohibits the importation from the countries and localities listed therein of all species and varieties of citrus fruits, excepting only oranges of the mandarin class (including satsuma and tangerine varieties), on account of the citrus-canker disease. Oranges of the mandarin class (including satsuma and tangerine varieties) may be imported under permit and in accordance with the other provisions of the regulations issued under said order.

Indian corn, broom corn, and related plants.—The order of February 21, 1920 (Notice of Quarantine No. 41, with regulations), prohibits the importation in the raw or unmanufactured state of the stalk and all other parts of Indian corn or maize, broom corn, sweet sorghums, grain sorghums, Sudan grass, Johnson grass, sugar cane, including Japanese varieties, pearl millet, napier grass, teosinte, and Job's tears from all foreign countries and localities on account of the European corn borer and other dangerous insects and plant diseases. The regulations issued under said order permit the importation without restriction of sorghum hay from Canada and clean shelled or threshed grain, from any country, of the plants covered by this order. Provision is also made for the importation of broom corn under permit and in accordance with the other provisions of the regulations for manufacturing purposes.

Mexican corn.—The order of February 21, 1920 (Notice of Quarantine No. 42, with regulations), prohibits the importation of Indian corn or maize from Mexico, except under permit and in accordance with the other provisions of the regulations issued under said order, on account of contamination of such corn with cotton seed more or less infested with the pink bollworm.

Stocks, cuttings, scions, and buds of fruits.—The order of March 24, 1920 (Notice of Quarantine No. 44), prohibits the importation of stocks, cuttings, scions, and buds of fruits for or capable of propagation from Asia, Japan, Philippine Islands, and Oceania (including Australia and New Zealand) on account of certain dangerous plant diseases and injurious insect pests. Provision is made for the importation under special permits issued by the Secretary of Agriculture of limited quantities of stocks, cuttings, scions, and buds of fruits from the countries and localities named for the purpose of keeping the country supplied with new varieties and necessary propagating stock.

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